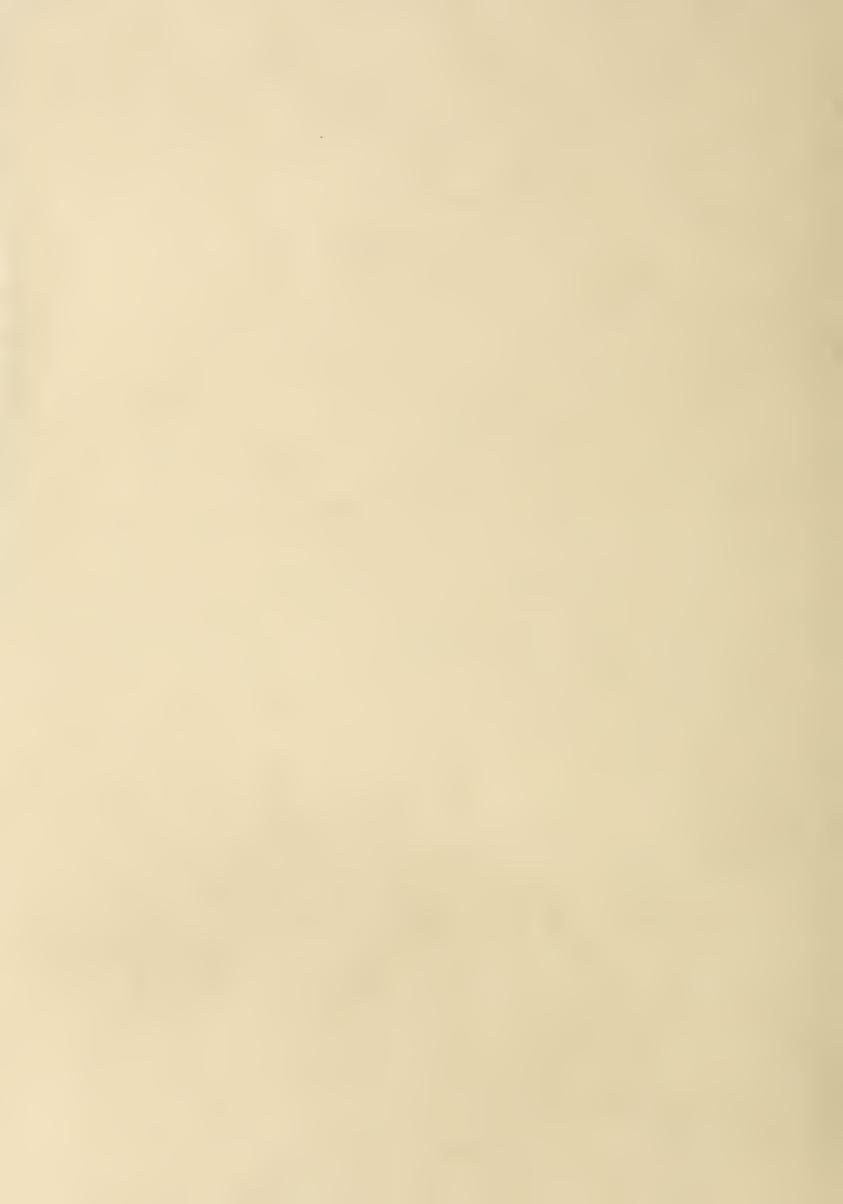
# **Historic, Archive Document**

Do not assume content reflects current scientific knowledge, policies, or practices.





A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

MITCHELL BROS. COMPANY VOL. XXVI.

CHICAGO, ILLINOIS, MAY 15, 1908.

No. 11.

ONE DOLLAR PER ANNUM.

SEE US ABOUT

# CAR PULLERS BELT CONVEYORS

### STEPHENS-ADAMSON MFG. CO.

MANUFACTURERS OF CONVEYING AND TRANSMISSION MACHINERY MAIN OFFICE AND WORKS, AURORA, ILL.

NEW YORK OFFICE 43 Exchange Place

CHICAGO OFFICE First National Bank Bldg



### Grain Elevator Belting

of special construction

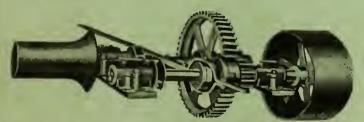
Best Made and Cheapest

Get our prices-

MFG. CO.

224-226 Randolph Street CHICAGO

# DID YOU EVER STOP TO FIGURE THE



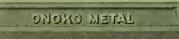
Lost in "spotting" your cars by means of the pinch bar? Install a small size carpuller and save this valuable time. Furnished for either manila or wire rope. The cost is not great.

> Write us for price on anything you may require for your elevator. General catalog sent upon request.

SKILLIN & RICHARDS MFG. CO.

**CHICAGO** 

"Every Bar is Good" ONOKO BABBITT METAL FOR



**ALL MACHINERY BEARINGS** H.Channon Company. Chicago.



A 4-foot Grain Tryer for \$8.00. Made of seamless steel tubing with steel tip and steel thimble on top end: wooden plug of best dried hard maple. Other sizes to order. Used by prominent concerns throughout the country.

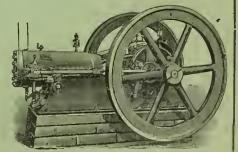
WILLIAMS-LLOYD MACHINERY CO., 337-339 Dearborn St., Chicago

### GAS AND ENGINES **GAS AND**

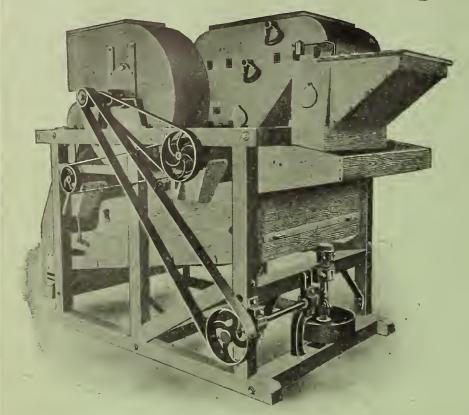
THE IDEAL ELEVATOR POWER

WHEN YOU BUY THE FOOS you get no experiment, but a High-Class Reliable Engine, which is the result of TWENTY-ONE YEARS of Gas Engine Experience, and which is built in the LARGEST EXCLUSIVE GAS ENGINE PLANT IN AMERICA. We can furnish Horizontal or Vertheal, in sizes from 2 to 500 H. P., in all types suitable for all fuels. Speed regulation guaranteed within 2 per cent from no load to normal. Write for Free 40-Page Foos Book No. 33.

THE FOOS GAS ENGINE COMPANY Springfield, Ohio



# The Ohio Oscillating Corn and Grain Cleaner



Agents in all parts of the U.S.

#### THE BEST BUILT AND GIVES BEST SATISFACTION

A perfect machine for cleaning Corn, Wheat or Oats. It meets every requirement of the Elevator trade. It is provided with scalping, main, seed or cockle screens; they are quickly interchangeable. The machine derives its motion from the fan shaft. The vertical eccentric shaft is driven by a pair of noiseless cut bevel gears from the lower counter, which in turn is driven direct from the fan shaft.

Our circular illustrates and describes this machine thoroughly, tells about the air currents, discharge spouts, slides and wickets. Guaranteed to give absolute satisfaction. Will clean all kinds of grain.

Have you seen our Fan Discharge Sheller with Adjustment?

Send for our Catalogue, describing CLEANERS, SHELLERS, DRAGS, MAN-LIFTS, Etc.

# THE PHILIP SMITH MANUFACTURING CO.

Warehouse and Elevator Machinery and Power Transmission SIDNEY, 0H10



## ELEVATOR MACHINERY AND SUPPLIES

FLOUR AND FEED MILL MACHINERY

STEAM AND GAS ENGINES

Pulleys, Shafting, General Power Transmission Machinery, Roll Grinding and Corrugating

LARGEST FACTORY AND STOCK IN WESTERN COUNTRY

Send for 450-Page Catalog

### GREAT WESTERN MFG. Co.

General Office and Factory LEAVENWORTH, KAN.

Send for

Descriptive Circular and Prices.

Warehouse and Salesrooms 1221-1223 Union Ave. KANSAS CITY, MO.

# Peerless Automatic Distributing Spout FOR COUNTRY ELEVATORS

There are no circumstances or conditions that grain will mix or scatter when being distributed.

No loss, no muss, no bother.

140 1033, 110 111033, 110 1001110

It is thoroughly well made.

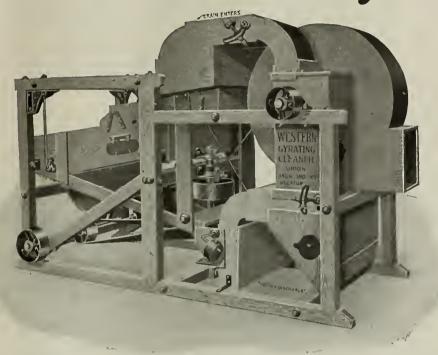
It fits in place of other spouts.

It operates like other spouts and with same indicator appliances.

It may be switched from bin to bin when elevating or from a filled bin without waste or mixture.

HAYES MFG. CO., Detroit, Mich.

# "Western" Gyrating Corn Cleaner



Made in seven sizes. Capacities from 200 to 1,800 bushels per hour

Some of our best talent has been employed the past year in planning, constructing and experimenting with a Rotary Cleaner, and have now gotten the machine to the point where it is pronounced perfect, and we are offering it to the trade.

The machine is of the gyrating family, but has three (3) distinct movements, rotary, oscillating, and a tossing motion, for which we have applied for patent. The rotary movement gives the machine great capacity, the oscillation frees the screens quickly, and the tossing motion positively prevents the screens clogging with small pieces of cob, etc.

We use double screens. The top screen is composed of a set of fingers over which the cobs pass from the receiving hopper, falling from these to a scalping screen with large perforations, which extends full length of machine, making quick separation and passing the cobs off the end of machine at convenient point to be spouted as desired. The grain thus scalped falls on a screen of proper perforation to make a perfect separation. A grain pan runs under this lower screen full length and carries and deposits the grain on a return pan which conveys it back to fan leg, where the cleaning process is completed; the grain dropping down the fan leg; the screenings deposited in vacuum chamber; and the dust and light particles to dust room. This return pan is provided with a wire screen over which the grain passes, of proper mesh to take out all seeds, gravel, etc., and is hoppered to carry these to one side of machine to a convenient point to spout as desired.

#### CLAIMS

WE claim greater capacity, better separation, better cleaning, better balance (less vibration), better control, greater durability, and last but not least, the most convenient and least expensive machine to install.

We refer without permission to the following users of our Gyrating Cleaner:

Write for catalog and prices.

We also make the "Western" Corn Sheller.

### UNION IRON WORKS

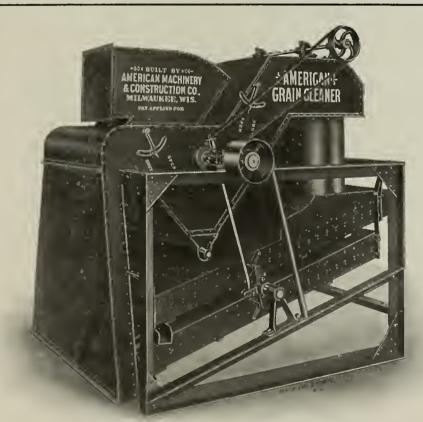
:-:

Decatur, Illinois

Lincoln, Ill.

Alhambra, Ill.
- Urbana, Ill.

Swanton, Ohio Franklin, Ill Paris, Ill.



#### THE AMERICAN GRAIN CLEANER

This is the only machine in which the principle of PNEUMATIC or AIR CLEANING has been made the basic feature. The great importance of this feature will be more readily understood by taking into consideration the fact that practically 90% of the impurities are lighter than the grain or malt, and that the only way to accomplish a thorough separation is by employing a perfect system of AIR SEPARATION.

This and other exclusive features are fully described in our circular, which will interest you.



#### THE AMERICAN CYCLONE ASPIRATOR

This machine is built on the same principle as the American Grain Cleaner, and the Pneumatic Cleaning is done in the same manner, but it does not have the shaker screens. It is used to separate oats and all light impurities from wheat, rye, eorn and barley, and also to separate all sprouts,

chaff and dust from the malt as it comes from the kilns.

Elevator Men, Millers and Maltsters who want á machine with a very large capacity to do the work as above recommended and do it thoroughly need an AMERICAN CYCLONE ASPIRATOR.

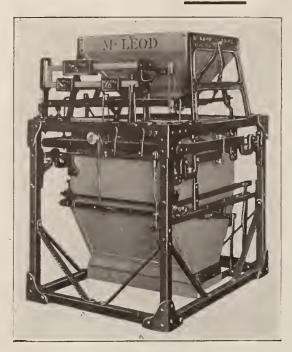
These machines are built in either all steel construction or in combination wood and steel.

Write for Descriptive Circular.

# American Machinery & Construction Co. 103 W. Water Street, Milwaukee, Wis.

# THE McLEOD AUTOMATIC SCALE

The scale that weighs



AVE you ever seen an automatic scale choke up on light oats or straws in the grain? Of course you have, but not a McLEOD!! We guarantee them against this.

Do you want an automatic scale that can be set in one second to weigh by hand, thus testing at any stage of your work whether your grain is running uniform or varying in grade? If so, you want a McLEOD.

Factories at Bloomington, III., and Marietta, Kan.

NOTE—The McLeod. Automatic Scale was formerly made under lease of our patents, by a company at Peru, Ill., but this lease terminated July 17, 1907, and anyone buying a McLeod Scale from any firm except ours will be liable to us for a royalty.

Agents wanted among grain men everywhere For catalog and terms address

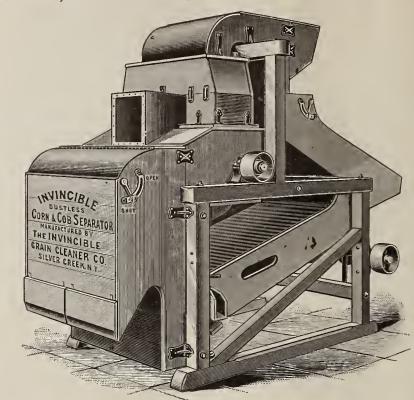
McLEOD BROS., - Bloomington, Ill.

# **CLEAN YOUR CORN**

This Separator takes out cobs, silks and all foreign matter and gives a high grade of corn.

It is the most popular corn and cob separator on the market, the result of

its extremely nice work. Order now.

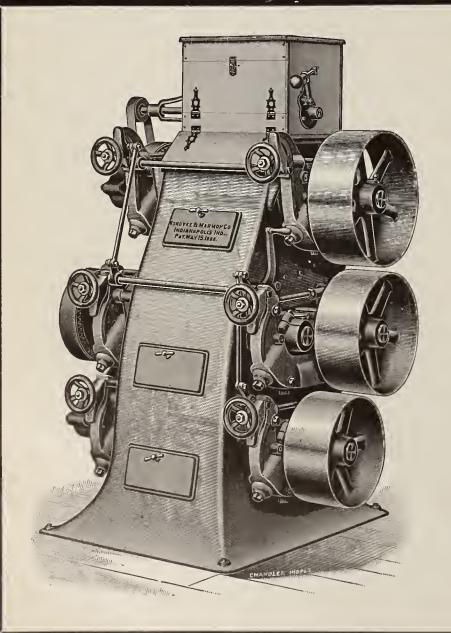


# INVINCIBLE GRAIN CLEANER COMPANY

SILVER CREEK, N. Y., U. S. A.

W. J. Scott, 512 Traders' Bldg., Chicago, ill.

Edward A. Ordway, 225 Exchange Bldg., Kansas City, Mo.
The Strong-Scott Mfg. Co., Minneapolis, Minn.
C. L. Hogle, 526 Board of Trade, Indianapolis, Ind.
N. B. Trask, Lochiel Hotel, Harrisburg, Pa.
Portland Iron Works, Portland, Ore.



The N. & M. Co.

# THREE-PAIR-HIGH SIX-ROLLER MILL

The most substantial, most economical in cost of maintenance. Has great capacity and requires comparatively small power. The only Six-Roller Mill with drive belts properly arranged to place the belt strain on bottom of bearings, where it belongs. It is not the cheapest mill in first cost, but it is by long odds the cheapest in the long run. It is without question the best roller feed mill on the market. Feed grinding pays best when you have a mill which will do perfectly any kind of grinding required and stand up under hard work without breakages and delays.

Send for Catalogue

#### **ELEVATOR SUPPLIES**

We carry a complete stock of Heads and Boots, Elevator Buckets and other Elevator Supplies. All orders are given the very best of attention.

# Nordyke & Marmon Company

America's Leading Flour Mill Builders

Established 1851

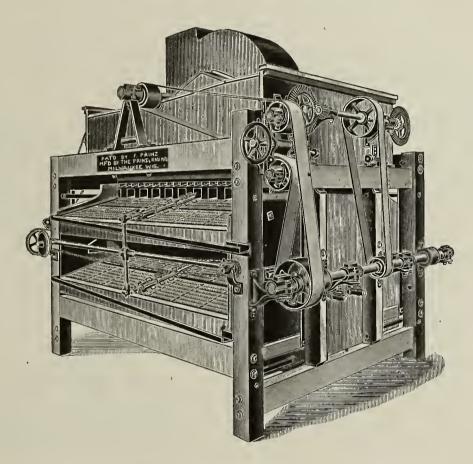
INDIANAPOLIS, IND.

# PRINZ AUTOMATIC SEPARATORS

ARE SPECIALLY ADAPTED FOR

# ELEVATOR SERVICE

AUTOMATIC IN OPERATION AS WELL AS IN NAME



The first Separator with a perfect automatic feeder spreading the grain the full width of sieve.

The first Separator fitted with a perfect automatic traveling sieve cleaner.

The first Separator built with seed screens at the head of each and every sieve.

The only Separator spreading the grain out in a very thin stream and using a short travel sieve.

For Descriptive Circulars Write

# THE PRINZ & RAU MFG. CO.

Milwaukee, Wis.

REPRESENTED BY W. G. Clark, 415A La Salle Ave., Chicago, Ill.; A. H. Kirk, 1-A Chamber of Commerce, Minneapolis, Minn.; G. M. Miles, 1057 Pierce Bldg., St. Louis, Mo.; F. E. Lehman, 124 Board of Trade, Kansas City, Mo.; C. H. Near, 770 Ellicott Square, Buffalo, N. Y.; M. D. Beardslee, 106 Piquette Ave., Detroit, Mich. EUROPEAN REPRESENTATIVES, Ingenieur Bureau, Prins Mauritsplein La, The Hague, Holland.

# Rope Drives

We design and install complete rope drives. We are experienced in this line, and drives designed by us are successful. We supply the best grade of Manila rope. Our Machine-molded sheaves are perfect in balance, accurately finished and free from flaws injurious to the rope.

We cast and finish sheaves of all sizes—English or American system— Pulleys, Band Wheels, Flywheels, Drums, Gears, Sprocket Wheels, etc. We manufacture Shafting, Pillow Blocks, Hangers, Floor Stands, Elevator Casings, Heads and Boots and all kinds of Elevating, Conveying and Power-Transmitting Machinery. Headquarters for Supplies.

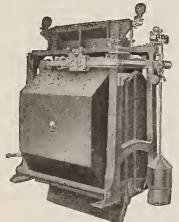
# H. W. Caldwell & Son Co., Chicago

Western Ave., 17th-18th Sts. NEW YORK, Fulton Bldg., Hudson Terminal, 50 Church Street.



# Fairbanks Automatic Scales

### HIGHEST DEVELOPMENT OF **AUTOMATIC WEIGHING**



### SIMPLE

Operated wholly by gravity; no springs, few parts.

#### RAPID

Double compartment hopper, each side dumping as opposite fills.

#### ACCURATE

Has sealed standard weights and graduated beam and can be balanced and tested at any time without dumping.

And above all, Fairbanks Quality. Write for Circular No. 544 A. W.

# FAIRBANKS, MORSE

Wabash Ave. and Eldredge Place. - CHICAGO

### MIND THAT AMBUSCADE

An Ambuscade Scale is one that lies in weight and is a weigh off

Buy the RICHARDSON, which never lies

"Damar, Kan. "I have tested the Automatic Elevator Scale that I purchased of you last August and find it absolutely accurate and correct. Accept thanks, as it has saved me the price in collecting shrinkage on

RICHARDSON SCALE COMPANY

7 Park Row, New York

122 Monroe Street, Chicago

# AIR DRIED GRAIN

(NOT KILN DRIED)

The Ellis Drier insures even and perfect drying at low temperatures. The only machine where the air passes through the grain uniformly and reaches every kernel. Built in all sizes from five bushels' capacity and up.

"Ellis Grain Drier"

### ELLIS DRIER CO.

715-719 Postal Telegraph Bldg.

Chicago



CO-BARTLETT

CLEVELAND O.



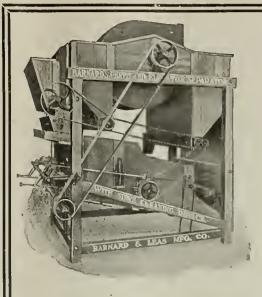
# BE SURE

To equip your Grain Elevator Building with our light self-Strong and substantially

#### INEXPENSIVE, QUICK

stairs. Cost no more than stalrways and take up onequarter the room. Correspondence Invited.

NEY ELEVATOR MFG. CU. SIDNEY, OHIO



# ELEVATOR MACHINERY AND SUPPLIES

We make or supply everything necessary to completely equip Elevators of all capacities.

Barnard's Perfected Separator with Sieve Cleaning Device.

The Victor Corn Sheller.

The Cornwall Corn Cleaner.

Other Shellers and Cleaners.

Willford's Light-Running, Three-Roller Feed Mills. Elevator Heads and Boots.
Belt Conveyor Apparatus.

Barnard's One, Two and Three Pair High Feed Mills.

Belting of All Kinds.

Conveyors, Power Connections.

Elevator Supplies of every description.

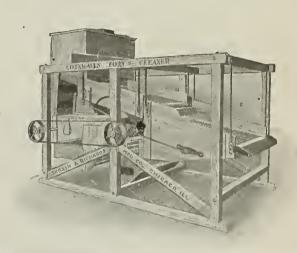
Send for Latest Catalogue



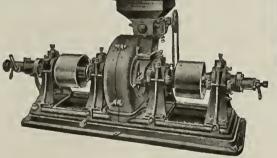
# Barnard & Leas Mfg. Co.

BUILDERS OF

Elevator Machinery and Supplies MOLINE, ILL.



# Get In Line With a



# Monarch Attrition Mill

and make money grinding feed. You may be undecided about the mill to buy, but after you have investigated the many good points of the Monarch you will want no other feed grinder. Feed grinding is just as important as the manufacture of flour, and the man who grinds feed scientifically is the one who will get the business.

We have just issued

#### A NEW CATALOGUE

that covers the scientific grinding of feed thoroughly. It treats the subject from a new standpoint and also tells why the Monarch has phosphor-bronze interchangeable bearings; cable-chain oilers; double movable base; safety spring; quick release; relief spring; special adjustable endless belt drives; hammered steel shafting; ball bearings and other improvements not found in competing mills.

Mention amount and kind of power you expect to use for operating a mill

# SPROUT, WALDRON & CO.

John Williams Taylor, Southwestern Agent, 401 Pacific Ave., DALLAS, TEXAS Box 320, Muncy, Pa.



# The "Eureka" Corn Dryer



Dries the grain uniformly and extracts any percentage of moisture desired.

Most economical, dries continuously, inexpensive to adopt.

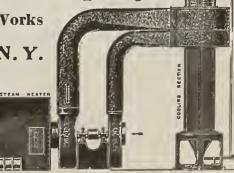
Built in capacities of five bushels to any quantity.

Satisfactory Results Guaranteed

### The S. Howes Company

"Eureka" Works

SILVER CREEK, N.Y.

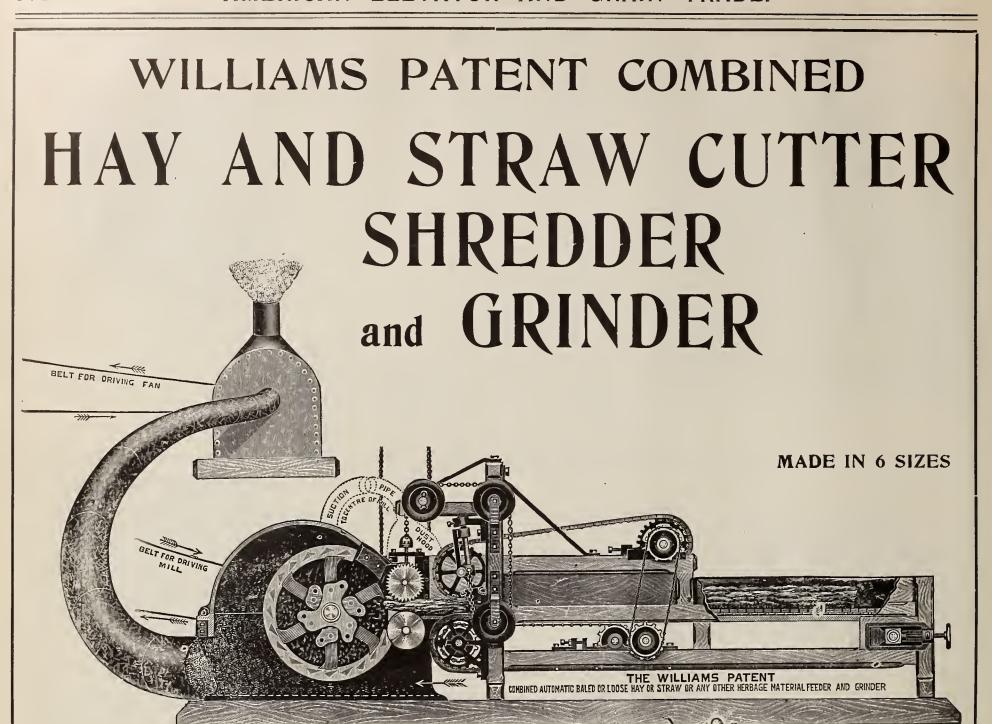




#### Represented by

W. E. SHERER, 309 S. Third St., Minneapolis, Minn. J. D. MATTESON, 309 S. Third St., Minneapolis, Minn. J. N. BACON, Spencer House . . . Indianapolis, Ind. GEORGE J. NOTH . . . . . . . 1329-1330 Monadnock Block, Chicago, Ill.





# THE ONLY VERSATILE FEED GRINDER EVER PRODUCED

They will reduce EAR CORN with the HUSK on.

They will reduce ALFALFA HAY from the BALE or from the STACKS.

They will reduce ALFALFA HAY and EAR CORN together.

They will reduce ALFALFA HAY and SHELLED CORN together.

They will reduce ALFALFA HAY and OATS together.

They will reduce ALFALFA HAY and FODDER OF ALL KINDS, with the CORN on.

They will reduce ALFALFA HAY and PEA VINES.

They will reduce EAR CORN ALONE or SHELLED CORN ALONE.

They will reduce OATS ALONE.

They will reduce ALFALFA HAY and two other kinds of CEREALS at the same time, as each machine has three separate feeding places.

They will reduce ANY FORAGE material or CEREAL, together or separately.

They will reduce GREEN CORN from the field.

They will reduce CLOVER HAY, TIMOTHY or ANY KIND OF STRAW.

They are CUTTERS when desired, GRINDERS when desired and SHREDDERS when desired.

They are COB CRUSHERS when desired.

They will reduce COARSE OR FINE by changing cages.

They will reduce OAT HULLS, RICE HULLS, FLAX SHIVES or any other FOOD MATERIAL.

They produce two grades of goods AT THE SAME TIME, coarse and fine, BY OUR COMBINED SYSTEM OF COLLECTING AND SEPARATING.

They WILL GIVE DOUBLE THE CAPACITY FOR THE POWER EXPENDED AND COST FOR REPAIRS OF ANY KNOWN GRINDER ON EARTH.

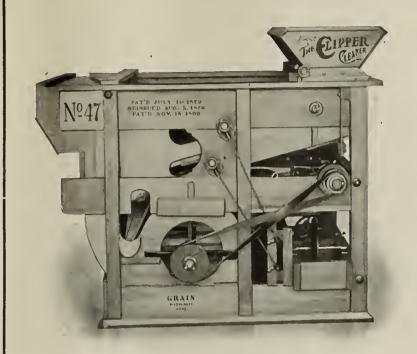
We have a corps of competent milling engineers in the field making estimates and taking contracts for the installation of complete alfalfa meal plants, from the stump up.

For Further Information Write for BULLETIN NO. 7

Oklahoma Representative: Chas. A. Tappan, 18 North Hudson Street, Oklahoma City, Okla.

# THE WILLIAMS PATENT CRUSHER & PULVERIZER COMPANY

ST. LOUIS, MO., U. S. A.



# The No. 47 Clipper Cleaner

is unequaled for handling seeds or grain in local elevators. This machine has Traveling Brushes on the screens, which enables you to keep it working to its full screen capacity all the time. It is very light running, strongly built, easily installed and simple in operation. We guarantee this Cleaner to give perfect satisfaction on clover seed, timothy or any kind of grain, and it can be operated with

one-fourth the expense for power of any suction cleaner on the market. It will not require over one-half of one horsepower on clover or any kind of seed, nor over one horsepower on grain. If you are looking for a first-class, up-to-date cleaner of moderate capacity, we would be glad to send you catalog and give prices and particulars upon request.

# A. T. FERRELL & CO., Saginaw, W.S., Mich.

### WHY PAY CORN PRICE FOR WATER?

Get a Hess U. S. Moisture Tester. Anyone can make tests in 20 minutes. It tells you how much moisture is in the grain and thus protects you in shipping, storing or buying. Every grain man should have one. Free booklet.

### THE HESS PNEUMATIC GRAIN DRIER

USED EVERYWHERE. You've heard of it. We have all sizes in stock and can ship quickly. There's time yet for you to insure against spoiling grain during the germinating season this spring. Ask for booklet.

### HESS-DRIED CORN

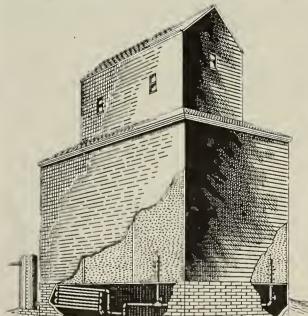
Sometimes called kiln-dried (incorrectly). Made in Hess Driers and sold everywhere—here and abroad—at a premium. Keeps in all climates—germinates strongly—mills perfectly. Ask us for a list of dealers who use our driers and who will supply it.

HESS WARMING & VENTILATING COMPANY

910 Tacoma Building, CHICAGO

# Johnson's Grain Dryer and Renovator

A Pneumatic Process for Cooling and Drying Grain Without the Use of Heat or Chemicals.



Piper City, Ill., Feb. 3, '08 E. G. Isch & Co., Peoria, Ill.

Gentlemen --- Yours of the 30th inst. to hand, and in reply will say that we know that the dryer is a good thing, as it has made us money so far. We have the elevator almost full of wet corn that we have no fear now of keeping until we get it dried out Before the dryer was put in we were afraid to handle this crop. We would not be without it or hesitate recommending it to all grain dealers. We remain

Very truly yours, Geo. D. Montelius & Co.

#### The Johnson Dryer and Renovator

may be installed in any Elevator, Corn Crib, Oat or Wheat Bin, Car, Boat, Steel or Cement Tanks or any Grain Receptacle. It can be placed in basement, engine room or elsewhere and will not increase your insurance.

It will make you money.

E. G. ISCH & CO., Manufacturers PEORIA, ILL.

# Monitor Compound Shake Warehouse Separator

Built with or without sieve cleaners on each screen as desired. Equipped with automatic oiling eccentrics (best device of its kind built) and ring oiling bearings when specified. Has our patented air control, which places it in advance of anything on the market.

If you don't know this separator, write and we'll refer you to the nearest user, so that you can see it in operation and learn from first sources the story of its economy, satisfaction and perfect operation.

# We Originated the Combination Corn and Grain Cleaner

Imitations never equal the original. Recognizing the need of a Combination Cleaner we placed this machine on the market two years ago, the original and first machine of its type built. Its success was instantaneous and since then we have sold large numbers of the cleaners, each machine placed finding a strong advocate.

Have you need for such a machine? Write and we will give you most complete details.

# HUNTLEY MFG. CO., Silver Creek, N.Y.

BRANCH OFFICES:

302 Traders Building, Chicago, Ill., F. M. Smith, Agent 316-318 Fourth Ave., South, Minneapolis, Minn., A. F. Shuler, Agent 121 Front Street, New York, N. Y., W. K. Miller, Agent 10 Board of Trade, Kansas City, Mo., H. C. Draver, Southwestern Agent Mississippi and 17th Streets, San Francisco, Cal.,

Berger, Carter Co., Pacific Coast Agents
A. S. Garman, General Agent, Akron, Ohio
S. J. McTiernan, St. Louis Agent, Terminal Hotel



A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

MITCHELL BROS. COMPANY VOL. XXVI.

CHICAGO, ILLINOIS, MAY 15, 1908.

No. 11.

ONE DOLLAR PER ANNUM,

#### MT. CLARE GRAIN ELEVATOR.

The Mount Clare Grain Elevator shown in the

ing by the architects and engineers and builders, James Stewart & Co., Chicago, while designed by its owners and operators, the Baltimore & Ohio Railroad Company, for local service only, will add materially to the elevator capacity at Baltimore, which is now none too great for conducting both the local and export business of that market. It has been designed, therefore, on rather unusual lines, seen from a Western point of view, at least, its purpose being to take in consignments of grain from the West, sent in over the B. & O. R. R., and clean, store and deliver the grain into wagons, in bulk or sacks, as demanded by the local grain and feed dealers. The house will be, in short, a monster feed storage accessible to all local dealers who may lease bins for their grain and have it delivered from the bins to their own places of retail business or to their larger customers

The construction is entirely fire-resisting, being of reinforced concrete from the foot of the foundations to the top of the bins, and without wood in any part or place. The cupola will he a steel frame, covered with galvanized iron. There will be 130 bins. ranging in size from 1,000 bushels' capacity to 2,500 (generally of the smaller size), giving all told a storage capacity of 250,000 bushels

On the first floor of the elevator will be three

sacking floor, on which are to be eight automatic driveways, extending through the house, for team- scales. These will travel in each bay to serve ing, clevated platforms being arranged between all the bins tributary thereto. There will be two picture, which has been made from a wash-draw- the driveways. Above the driveways will be the tracks for receiving and shipping by cars, and

cars will be unloaded into car pits which will each hold 1,600 bushels. latter discharge upon belt conveyors leading into the house and to the elevator legs. Each set of hoppers will have an interlocking system and gates for letting the grain out of the car pits.

There will be two scales of 1,000 bushels' draft each in the cupola for weighing the grain in and out of the house. From the scales, fixed and movable spouts will lead the grain to the

The cleaning machinery will consist of aspirators of conc type.

The power will be threephase, 400-volt, 25-cycle induction motors using a grouped-type drive; in other words, all legs will be driven by a motor from a countershaft, each leg having a friction clutch.

The house when completed will be operated by the B. & O. Railroad Company as a public house, and it is no guess that the service the house will be able to offer will be appreciated by the consuming public at Baltimore. No doubt, too, the old wooden houses that have been of necessity patronized by the trade will feel the effects of this construction of a fireproof and perfectly equipped competitor.

The permit for the erection of the building was issued by the Baltimore Building Inspector on May 3, the cost being put at



MOUNT CLARE GRAIN ELEVATOR, BALTIMORE, OWNED BY B. & O. R. R. CO. Under Construction by James Stewart & Co., Chicago.

\$150,000. Its exact site is in Pratt Street, between Parkin and Poppleton Streets.

[Circular No. 117, U. of I. Exp. Station.]

#### DRY ROT OF CORN.

BY T. J. BURRELL, Chief in Botany, and J. T. BARRETT, First Assistant in Botany.

The so-called "dry rot" of ear corn, which has long been recognized, owes its name to the manner in which the ear is affected in the field. In general the husks tend to turn prematurely yellow to sooty, and the ear becomes partially or wholly shriveled and much decreased in weight. Sometimes the ears remain upright with the husks closely adhering to them. In other cases the shanks are weakened and the affected ears hang limp from their attachment, or the diseased condition may not be detected until the husk is removed.

These diseases, appearing in more or less severity year after year, have become of sufficient economic importance during the past four or five years to cause general concern among farmers. In 1906, the year in which there was the greatest amount of dry rot, so far as any records have been made, the loss was 4.5 per cent of the entire crop in Illinois. This represents a loss of over 15,000,000 bushels, having a value of more than \$5,000,000. The loss in 1907 was less than 2 per cent of the crop, or about \$2,000,000.

The most common of these dry rot diseases and the one which during the past two seasons has caused about 90 per cent of the damage is due to a fungus known as Diplodia maydis Sacc. The infected ears shrivel up more or less, darken in color, and become light in weight. The kernels are also shriveled, very brittle and loosely attached to the cob. The fungus penetrates all portions of the ear, kernels, cob and husks, and produces many dark brown, two-celled spores which serve to propagate the fungus.

There are several other forms of dry rot which are less important but cause considerable damage which seems to be on the increase. These are also due to fungi and belong, for the most part, to the genus Fusarium-members of which cause serious damage to quite a number of our important cultivated plants. The effects of these different species of Fusarium on the corn are characteristic and quite easily distinguished from each other. The ear may be affected in localized patches which are eovered with a rather compact mass of white mold-like growth, when only the inner husks adhere to it, or the entire ear may be affected in the same way. Another form shows very much like the Diplodia disease, except that the fungus has dark pink to red color. In this case infection usually takes place in the tip of the ear. Another form may be recognized by the broken, crumbly ends of scattered kernels. With this there is little external growth of the fungus, but when present it is white, sometimes tinged with pink. The crumbly contents of the kernel eontain many mostly one and two eelled spores.

In the ease of the Diplodia disease, and quite probably in that of the other forms, the fungus perpetuates itself over winter on the old diseased ears and old stalks. It is not usually difficult to find throughout the summer in old eorn fields, where the disease has previously prevailed, many pieces of old eorn stalks which are infected with the Diplodia fungus. Stalks known to be two years old have been found still producing spores. During moist periods, spores ooze from these stalks in abundance and are blown singly or in masses long distances, as has been frequently demonstrated by experiment.

The fungus does not, according to present knowledge, grow upon any other host, and upon developing eorn only on the ears. Not so much is known of the other fungi here concerned, but since 90 per eent of the rot is due to Diplodia, less attention need be given to them. Diseased ears are fruitful sources of subsequent infection and should be removed as promptly as possible.

This can be readily done, at the time of husking if not before. Keep them in a separate receptacle and hurn them as soon as practicable. In addition to this, in fields where any considerable amount of disease has been found, the stalks should also have attention, whatever crop is to follow. Something may be gained by carefully plowing them under and leaving them well covered, but burning may be required even if this is otherwise bad procedure. Such a field should not be replanted to corn for at least two years.

If the first suggestion is always followed and the others are put into practice whenever nccessity demands it, these serious losses may be practically prevented.

A bulletin will be issued treating of these diseases in full later in the year.

#### PROF. ANDREW BOSS.

Prof. Andrew Boss, of the University of Minncsota Experiment Station, St. Anthony's Park, St. Paul, Minn., belongs to that class of great men who are justly celebrated because they "do



PROF. ANDREW BOSS.

things," but he belongs to that larger contingent of his class of great men whose accomplishments are less frequently heralded to the world under block type headings or in the "double extras" of the newspapers than those of men whose deeds are too often "written in water" or in the sands of the beach. He is one of those who literally make "two blades of grass grow where but one grew before" and makes the two far more fruitful than was the one at its best; but the ultimate reward for such abiding service to humanity comes slowly and often is subjective rather than objective in form, popular recognition coming by slow degrees and often only "after many days."

Prof. Boss was born on a farm in southeastern Minnesota in 1867. He remained at home for twenty-two years, sharing with his father and brothers the labor and management of the 360acre farm. During that time he received a good common sehool education. In 1889 he entered the Agricultural School of the University of Minnesota graduating with the elass of 1891. He entered upon the duties of foreman at University Farm immediately upon graduation and was promoted in turn to the positions of farm superintendent, assistant agriculturist and associate professor of agriculture, working under and with Prof. W. M. Hays, until he was appointed assistant secretary of agriculture in the U.S. Department of Agriculture. Upon the retirement of Prof. Hays from eollege work, Prof. Boss was placed in charge of the Agricultural Division, with the title of Professor of Agriculture and Animal Husbandry, that being his present position and title.

Bulletin 62 of the Minnesota Experiment Sta-

tion, the joint work of Prof. Hays and Prof. Boss, introduced a new era in the improvement of cereal crops, and was the first publication on the subject of crop improvement through systematic plant breeding work. The work has been of great importance to the spring wheat growing region. The method has since been enlarged and bettered until there is now at St. Anthony Park, under the direction of Prof. Boss, one of the greatest plant breeding nurseries on the continent. Its magnitude may be better realized, perhaps, by the explanation that in 1907 nearly twelve acres of land were required for the growth of the 900,000 to 1,000,000 individual plants, of which systematic notes and records are taken.

In addition to the plant breeding work, some very valuable investigations are being conducted in the rotation of crops and in cost of production, all of which bear directly upon the business of the farmer and indirectly upon the production of the cereal crops. Live stock husbandry has also occupied the attention of Prof. Boss during this time. As assistant professor of agriculture, he worked up a course of instruction in farm meats, which was the basis for a Government bulletin on the subject and which has been widely copied in other institutions,

At present there is in progress, conjointly with the U. S. Government, a co-operative project in cattle breeding which promises to be of great importance in introducing co-operative methods of breeding animals in community centers. As secretary of the Minnesota Live Stock Breeders' Association and executive officer of the Stallion Registration Board Prof. Boss is exerting a wide influence in live stock improvement and is prominently identified with many movements which have in view the betterment of agricultural conditions.

#### TRYING TO BOOM DURUM.

A meeting of the North Dakota Durum Wheat League was held at Devils Lake, N. D., on April 21 for the purpose of devising ways and means for reducing the spread between that class of wheat and regular hard spring grades of the Northwest. The meeting, which was pretty well attended, was called to order by Senator Cashel of Grafton, president of the League, and M. H. Brennan acted as secretary.

Professor Ladd of the Agricultural College, the first speaker, described the baking tests carried on at the college, and dcelared it as his opinion that almost twice as much durum can be raised as of other varieties, and even with the present difference, there would be from \$5 to \$7 difference in the yield per acre in favor of durum. He agreed that the durum is harder to mill than the fife or bluestem, but that there is a larger per cent of flour produced from it; but he said he believed the difference in price complained of is not on account of the difference in the flour-making qualities of the wheat, but that the price is regulated by the millers, which difference, as it now exists, about 20 cents, is out of reason. He recommended agitation against the difference in the price of the wheat, as the difference really does not exist, for the durum wheat is blended with the other wheats in many instances and sold at the same price as the hard wheats.

Mr. Silverton, a miller at Crookston, who grinds durum exclusively, recommended that the people be educated to the use of durum flour. He said he had tried to work up a trade in this product, but had not met with much success. The difference in the prices of the different kinds of wheat is regulated by supply and demand, and the only way he knew of to put durum wheat where it should be is to create a demand for it.

Mr. Walker, a miller of Oaks, also has a mill which grinds durum exclusively. He has put about \$26,000 in this mill and there is no one more anxious than he that durum flour come into more general use. He stated that the difference in the prices of the different kinds of wheat at this time

is because fife and bluestem are a short crop and thus bring a higher price than durum, which is not in such demand. If his mill had to depend on home consumption of its durum products, it would be obliged to close down.

A committee consisting of Ole Scrumgard of Devils Lake, O. G. Major of Hope and Capt. Main of Cando were appointed to investigate the matter and determine the best remedy for decreasing the difference in the price of wheat and report to the president of the League.

[For the "American Elevator and Grain Trade."]

#### THE ST. LOUIS MERCHANTS' EX-CHANGE'S FIRST SOCIAL GATHERING.

BY L. C. BREED.

On the evening of May 7 there was a unique gathering of the members of the Merchants' Exchange of St. Louis, in that it was the only time within its long existence that a purely social assemblage had ever taken place. The affair had its origin in the wish of some of the leading members to celebrate the occasion of the last payment on the bonded debt which has hung over the building since 1892.

More than 700 members of the Exchange and their guests, among whom were several prominent Chicago gentlemen, gathered at the Southern Hotel, where, during the course of the evening, they partook of a dinner and were entertained with a variety of interesting features provided by the committee of arrangements. Pending the entrance by the members and guests to the dining hall, they were regaled with a selection of lively music by the orchestra in attendance.

After the dinner had been partaken of, President Devoy, who had been provided with a miniature flour barrel for a gavel, acted as toastmaster. His opening address was mainly of an historical character and abounded in incidents and facts relating to the original founding of the Exchange and the subsequent growth of the organization. He then introduced the Nestor of the Exchange, Ex.-Gov. E. O. Stanard, who received an ovation as he rose to respond. Hon. David R. Francis was the next speaker, who was followed in turn by Mayor Wells, Walker Hill, the banker, M. G. Richmond, who served as president for the year 1906, and Geo. H. Morgan, for fortythree years secretary of the organization.

During his address, Mr. Francis expressed the hope that the feature of a social gathering of the members might be repeated next year and become a fixed custom, which suggestion was vigorously applauded.

Following the addresses was a "show," which consisted of a series of over one hundred pictures flashed on a screen. The pictures proved to be, in the main, excellent likenesses so far as the features were concerned, but the rest of the figure and the accessories were generally as grotesque as the imagination of the artist could conceive in hitting off the hobbies or avocations of prominent commission merchants, brokers, millers, elevator and railroad men. This feature of the entertainment was heartily enjoyed by the members, since many of the hit-offs were very clever.

The St. Louis Merchants' Exchange is, it is claimed, the oldest board of trade formed strictly for dealing in grain and flour in the United States. Of the original members few if any arc now living—probably none of the organization out of which the present Exchange was formed.

An appropriation for the National Corn Exposition at Omaha, which had been recommended by Secretary Wilson of the Department of Agriculture for the purpose of demonstrating the processes of making denatured alcohol, was provided for by the agricultural committee of the Senate. The appropriation is not, however, specifically set forth in the agricultural bill as was originally sug-

gested, but is taken care of in the general appropriation for the bureau of chemistry, which has been increased from \$725,000 carried by the House bill to \$810,000, of which \$10,000 is to be used by the Department of Agriculture for demonstration purposes at Omaha.

#### T. R. BALLARD.

Theodore R. Ballard of the Ballard-Messmore Grain Company, St. Louis, was selected by the Merchants' Exchange to represent that market at Washington when the Congressional committees were enquiring into the matter of national inspection of grain. St. Louis favoring that proposition, Mr. Ballard ably represented his constituency by such expert testimony as a man might offer who has been in the business of handling grain for the past thirty years, first as a country grain buyer and shipper and for the past eighteen years as receiver and commission merchant. Mr. Ballard could not overlook the practical difficulties in the way, and the force of his testimony was if anything strengthened by his frank recognition



T. R. BALLARD.

of those difficulties, which are not, however, insuperable from his point of view.

Mr. Ballard is a man of much distinction in the business world of St. Louis and the great area of the nation tributary to that city in a business way. He has been president of the Merchants' Exchange, and is one of the leading working members of that important body.

#### NATIONAL INSPECTION.

The national inspection legislation is in abeyance, for the present, an attempt on April 18 to have the McCumber bill incorporated as an amendment to the agricultural appropriation bill in the Senate committee on agriculture on Senator Hansbrough's suggestion having failed, as a point of order was made by Senator Money of Mississipti that it was new legislation, which was sustained.

Senator Hansbrough, who is ill and in the hospital, recently wrote Senator Warren of Wyoming, asking him to try to have the grain inspection bill reported out of committee at an early date. His letter was read at that meeting of the committee, but no action was taken along that line, as the committee had met only for the purpose of considering the agricultural appropriation bill.

The bill, however, provides for an appropriation to continue the work now being done in Government laboratories at Minneapolis, Duluth, Baltimore and New Orleans, to determine uniform grades for grain. To this appropriation clause an attempt was made to add the words, "such grades, when so fixed, to become the official standard for grading of grain;" but as members of the House interpreted this as giving authority

for Federal inspection, it was stricken out of the

#### DEFENDS SPECULATION.

Among the speakers at the recent meeting of the Ohio Millers' State Association was Secretary Geo. F. Stone, who spoke on the bills before Congress to prohibit "speculation," or, as their au thors say, "gambling," in grain. Secretary Stone in part said:

"The tangible assets of the United States are not in Wall Street nor in the hands of money holders and lenders anywhere; they are found in our agricultural resources, made constantly available at fair prices and not subject to violent fluctuations in values under the operation of the system of buying and selling for future delivery. I do not hesitate to say that, in my judgment, had it not been for the system of handling our grain our losses during the panic would have been disastrous and well-nigh irreparable in all departments of business.

"This system was devised wholly in the interest of the farmer and interior grain-buyer. It was not a scheme that in any sense was forced upon the country; it was framed in response to the urgent demand of the farmer, merchant and banker throughout the Mississippi Valley. It provides for the economical marketing of the chief grain crops of the West; it creates and maintains a broad, active and constant market for the sale of grain and provisions, independent of an immediate, actual, existing consumptive demand. It was an evolution and grew naturally, gradually and inevitably out of the pressing necessities arising from the rapid growth of a vast fertile area, whose teeming products awaited facilities for ready and constant sale at prices just to scller and buyer, to producer and consumer, and without any unfair advantage to either the capitalist or merchant on the one hand, or the farmer or country dealer on the other. This system provides for the constant conversion into cash, at fair prices, of an enormous yield, chiefly comprising grain and hog products, regardless of the volume offered, and altogether independent of the restrictions and limitations of an active consumptive demand.

"It has brought into existence the chief grain markets of the world. Without it the great West could not have been so fully developed and the Mississippi Valley states would not have been so quickly formed. It provides the agriculturist with ready money, which, in turn, finds its way through the country store to wholesale merchants in great centers of trade, and more than any other measure keeps the complicated machinery of business in harmonious activity. This ready money circulates without interruption through the arterles of our far-reaching commercial and industrial life, and sustains in a large degree our wholesale trade in all departments of business. Under the operation of this system the great crops are moved and realized upon and a ready and fair market is secured, regardless of the volume offered and without depreciation of values. It has created a constant demand from the great grain markets of the world; it permits the farmer and grain dealer to sell, whenever prompted to do so, either by his interest or necessity, without compelling him to make immediate shipment; it distributes grain when and where it is wanted; it is a servant of the law of supply and demand and cannot swerve from its fidelity to that law.

"Mr, Justice Holmes of the United States Supreme Court says that people will endcavor to forecast the future and to make agreements according to their prophecy. Speculation of this kind by competent men is the self-adjustment of society to the probable. Its value is well known as a means of avoiding or mitigating catastrophes, equalizing prices and providing for periods of want."

Send us the grain news from your neighborhood

#### GRAIN DEALERS AT PIQUA, O.

The first of May was Harry Kress day at Piqua, Ohio, for, as evidence of his popularity, on his call for a meeting to discuss freight rates, almost as many grain dealers responded as would go to make up an average annual meeting of the average state organization. The meeting took place at the Piqua Club, and was called to order at 10:30 a. m., by Mr. Kress, who made the following introductory remarks:

As the invitations for this meeting were seut out in my name, I may be allowed to extend to you a word of welcome.

We are glad to have you visit our little city, one of the best, we think, of its size in the statc. We are also glad for the chance to become acquainted with you; and I hope this meeting of men from widely scattered points may make for good fellowship and mutual business advantage.

But you were asked to come here for a more serious purpose. For some time, some of us have been couvinced that because of certain agreements between the great railroads running east out of Chicago and the Chicago Board of Trade, the grain shippers of Ohio and Indiana were being discriminated against and unjustly treated, the rate differential, owing to this agreement, being such as to put the shippers in these two states at a distinct disadvantage.

I have stated the case in part in my weekly White Letter and will not restate it now; but the farther I have looked into this the more the data I have been able to secure convince me that we have here a matter that should come before the Interstate Commerce Commission for correction.

My contention is and always has been that they are unaware of what the Ohio and Indiana shippers are now contending with. If what seem to be the facts in the case are really the facts, we cannot allow this agreement between the railroads and the Chicago Board of Trade to stand.

That we might be perfectly fair and see the matter from every standpoint, we have asked the Chicago Board of Trade, as well as the Toledo Produce Exchange, to be represented and present their side of the case, which we want them to

I have the conviction, gentlemen, that we might form a permanent organization that would work to our advantage, but whether that shall be done or not is for you to determine.

Our immediate business is to investigate this agreement I have referred to, and, if we find it to be inimical to the interests of the Ohio and Indiana grain shippers and a violation of the interstate commerce regulations, to appoint a committee to go before that body to place our case and the evidence supporting it.

That we may proceed in a parliamentary manner, I move the election of a temporary chairman and secretary.

Following, Mr. Kress was made chairman of the meeting and M. W. Miller of Piqua temporary secretary.

The morning speakers were Fred Mayer and Henry L. Goemann of Toledo, Ohio, and it was shown that the meeting was due to a mistaken impression as to the proportionate rate made from Chicago on business originating West, in its relation to Ohio points rate. Under the present grouping, the rates from points in Ohio and Indiana are not unfair in comparison with the Chicago rate.

In the afternoon the subject was further taken up in discussion by W. M. Hopkins, manager of the transportation department of the Chicago Board of Trade, and E. W. Seeds of Columbus, Ohio. Mr. Hopkins answered a number of questions regarding rates and Mr. Seeds showed that, on a mileage basis, all shippers were treated fairly, and that corn grown in Ohio had as fair rate as the corn grown in Illinois.

There being no other business to come before the meeting, an adjournment sine die was taken after a vote of thanks had been extended to Messrs, Mayer, Goemann, Hopkins and Seeds for their addresses and to Harry Kress for use of the Piqua Club hall and courtesies shown dealers while visiting in the city.

The following were among those present: Ohio: E. W. Seeds, Columbus; B. D. Heck, Sidney; F. E. Watkins, Cleveland; Charles C. Toland, Anna; Robert Davidson and B. E. Thomas, Greenville; John Hufnagle, Ansonia; H. L. Goemann, Fred werp. No other grain was shipped.

Mayer and J. W. Young, Toledo; Jos. Walcott, J. A. Conover, E. A. Grubbs, Greenville; S. S. Earhart, Burkettsville; P. M. Gale and H. Edward Richter, Cincinnati; Charles Jenkins, Marion; Captain Nutt, Sidney; J. F. Coppack, Fletcher; R. R. Bales, Circleville; Myron Silver, West Jefferson; W. H. Riddle, Sedalia; C. O. Peters, Columbus; Grant McMorran, St. Paris; J. W. Simmons, Pemberton; R. G. Calvert, Selma; Wes. Hardman, Woodstock; M. W. Miller, Harry Kress, Piqua; M. A. Peterson, Bloomers; P. C. Miller, Celina; W. S. Snyder, Kenton; Alden Beatley, Kings Creek; O. W. Jays, St. Marys; W. H. Persinger, Sidney; Geo. Klosterman, Montezuma; Horace Allen and Ogden Edwards, Troy; Edw. H. Hess, Coldwater; C. S. Behymer, Rockford; W. T. Taylor, Batkins; H. M. Dart, Toledo; J. L. Stemple, Ada; Reinhart Smith, Sidney; Aaron Wright, Pittsburg; Carl M. Wolcott, Conover; J. S. and David Arnold, Bradford; Chas. A. Long, Delphos; John Murray, West Jefferson; J. E. Wells, Quincy.

Indiana: J. M. Brafford, H. E. Kinney, H. C. Shepard, Indianapolis; W. R. Owens, Saratoga; Hugh Murray, Goodland; Jas. Wellington, Ander-



HARRY W. KRESS, Who Presided at the Piqua Meeting.

son; Chas. J. Buchele, Bluffton; F. H. Holt, Indianapolis; P. C. Miller, Williamsport; J. A. Washburn, Remington; H. H. Deam, Bluffton; Le Roy Winston, Tipton; W. B. Magill, Portland; John Hazlerigg, Cambridge.

Mr. Kress, in his "White Letter" of May 9, says: I think the men who addressed us felt they had a fair and unprejudiced hearing, and to some their statements and arguments may have seemed conclusive and satisfactory; but from the large uumber of letters and expressions I have received since the meeting, from shippers who were present, I am certain that the general conclusion was that the heart of the matter had not been touched. Whether the rate differential or Illinois proportional and six months' stop-off, which were talked about, are justified could be answered with better authority by the Interstate Commerce Commission than by myself.

I personally share in this judgment, and feel that it yet remains to be explained how in fairness grain can be shipped from Chicago to our Eastern markets for less than it can from points three hundred miles nearer the same markets.

My own personal feeling is that the great value derived from this meeting was the setting of the issue unsolved in clearer light. It also demonstrates that the best posted experts canuot satisfactorily explain some things; in short, that the Ohio and Indiana shippers have just ground for complaint, and that they should force the issue to a hearing; and this, I am convinced, they will

Experts from New Orleans in April included 154,285:40 bushels of corn, of which 128,571:24 bushels went to Belfast, the remainder to Ant[For the "American Elevator and Grain Trade."]

#### ACCEPTING GRAIN WITHOUT AN INSPECTION.

BY J. L. ROSENBERGER, Member of the Bar of Chicago and Illinois Bar.

In an action between an elevator company and a milling company one of the issues was as to the right of the milling company to recoup damages for an alleged breach of au express warranty in respect to the quality of the corn accepted and paid for by it. The jury were instructed, among other things, that, if the defendant accepted the corn, knowing its condition, then no defense could be set up on account of its defective quality, and that what was meant by knowledge, in this connection, was embraced in the provision of the Georgia code that "notice sufficient to excite attention and to put a party on inquiry is notice of everything to which it is afterwards found such inquiry might have led. Ignorance of a fact, due to negligence, is equivalent to knowledge in fixing the rights of parties."

The judge further said on the same subject: "I charge you, that if they (defendants) made an inspection as far as they could reasonably do, and were misled, having used ordinary care and diligence in making the inspection, and went as far as they reasonably could and there were hidden defects, or the condition of the corn was hidden from them and they could not by reasonable diligence have found it and they accepted it under these conditions, then they would be entitled to damages for the difference between the contract price and the actual value of the corn at the time it was inspected and it was received."

And further: "If you come to the conclusion that the corn is not No. 2 corn, and you come to the further conclusion that the defendants had an opportunity to examine the corn, aud did examine it, but did not make a thorough examination, having a thorough opportunity to do so, but accepted the corn under these conditions and paid for it, then you would not allow them anything for damages, because they would be held to have waived the warranty."

Also: "If you should come to the further conclusion that there was a partial examination, and the defendants examined as far as they reasonably could, and were not negligent iu so doing, and accepted the coru believing that it was No. 2 coru, and afterwards ascertained that it was not, then you would allow for that which was so examined and so accepted the difference between the contract price and the actual value of the corn so delivered."

The Supreme Court of Georgia holds (North Georgia Milling Co. vs. Henderson Elevator Co., 60 Southeastern Reporter, 258) that exceptions to these instructious were well taken, as the instructions were contrary to the law on the subject as laid down by this court, to the effect that no duty rests upon the purchaser who has bought goods under an express warranty to inspect the article purchased, or to exercise care in discovering any defects. He may rely on the contractual obligation of the seller that he will deliver goods of the quality warranted.

If, however, the articles be defective and the buyer know the fact and with such knowledge accepts them, he will be deemed to have waived the defects, and cannot recoup damages arising therefrom.

Of course, a warrauty of quality does not usually extend to patent defects, unless so intended by the parties.

A purchaser will be held to have waived an express warranty as to the quality of the goods purchased only where he has knowledge of the defect, and not where he might by the use of ordinary care or diligence have acquired knowledge of such defect. In other words, his waiver goes only to the extent of his knowledge and

not to discoveries which reasonable diligence might have brought to light. It is only in cases of implied warranty that the provisions of the section of the civil code, given in the charge quoted, are applicable.

The Elevator Company was seeking to recover damages from the Milling Company for refusing to accept about 28,000 bushels of the corn purchased, which the Elevator Company, after notice to the Milling Company, had sold at the latter's risk. The court holds that an instructlon was properly refused which stated that where the buyer refuses to accept the goods without legal excuse, the seller may resell the same for

#### THE CHICAGO HOME OF JAMES STEWART & CO.

The home of the grain elevator building department of James Stewart & Co. is on the eighteenth floor of the Fisher Building, No. 279 Dearborn Street, Chicago. Plenty of light comes into these offices, and when the weather is clear a view may be had of the shipping out on Lake Michigan and the huge warehouses and terminal elevators of the Illinois Central Railroad at the foot of River Street. Perhaps the lofty height, giving fresh, clear air, the magnificence of the view, the freedom from the noise and bustle of and have local and long distance telephone service

ing, if that be necessary, for the heads of departments. Immediately to the right is the estimating room, presided over by C. D. Wines, while opening from this room is the general office and accounting room, at the head of which is J. W. Thompson, secretary, as well as head bookkeeper and eashier. The room is shown in the lower lefthand picture, and Mr. Thompson, himself, may be seen seated at his desk in the center of the room.

From this office one passes to the private office of President and General Manager W. R. Sinks, and also that of Vice-President R. H. Folwell, head engineer. These offices are wide and roomy,



W. R. Sinks, President and General Manager. Entrance. R. H. Folwell, Vice-President and Engineer. VIEWS IN THE CHICAGO OFFICES OF JAMES STEWART & CO., ENGINEERS AND CONTRACTORS. The General Office.

the buyer's account, but must sell them at the con- the busy streets below, give an added inspira- with all the conveniences of modern offices. Mr. of goods, who upon the refusal of the purchaser to accept delivery of the same elects to resell them at buyer's risk, is not bound to resell them at the contract place for delivery and within the contract time for delivery. He will comply with the law, after giving notice to the purchaser of intention to resell, if the sale be made in good faith within a reasonable time and for the best price obtainable. He is not bound to sell at the contract time and place for delivery.

A number of line-house elevators in different parts of Nebraska, chiefly in the south, central and western sections, have lately been closed, and the cause is declared by grain dealers to be the stagnation in cereal movement.

tract place of delivery and within the contract tion to the designing of the large elevators which Sinks is seen at the left and Mr. Folwell at the time for delivery. The court holds that the seller the company has built. As the novelist and poet writes and sings best when close to nature, so also may not the mind of the engineer formulate its best conceptions when the only limit of the physical vision is the sky and the cool waters of Lake Michigan stretching away to join the distant horizon?

> The grain elevator building department of the company has occupied these offices since it was organized on March 1, 1905. The company was out of them only temporarily about two years ago, while they were being remodeled to give greater room and added convenience; so that the place has become home in the true sense.

The entrance door opens upon the reception room, which is wide and spacious and affords a comfortable resting place while the visitor is waitThe Drafting Room.

right in the picture.

The drafting room also is entered from the general office, as well as from the hallway. Fifteen men on the average are employed in this department.

This article would not be complete without reference to some of the large elevators which have had their inception here and which have been built under directions issuing from these offices. Most of them are of concrete; some are of wood, while others are of a combination of materials, in whole or in part, such as brick, tile and steel. A short list would include the following elevators:

Chicago, Milwaukee & St. Paul Railway Co.'s Elevator, Kansas City, Mo., 500,000 bushels.

National Rice Milling Co., New Orleans; ca-

pacity, 250,000 bushels; made exclusively for handling rice in bulk.

Western Canada Flour Mill Co.'s Mill and Elevator, Winnipeg, Man.; elevator capacity, 500,000 bushels.

American Malting Co., Buffalo, 2,500,000 bushels. Anheuser-Busch Brewing Association Elevator, St. Louis, 300,000 bushels.

Perot Malting Co.'s malt house and elevator, Buffalo, 500,000 bushels.

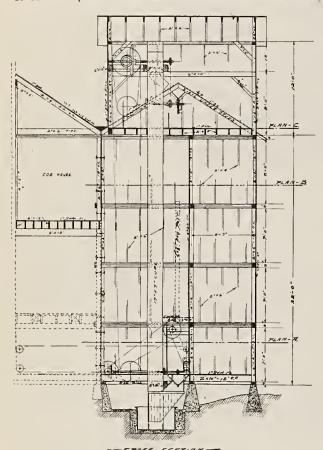
Baltimore & Ohio Railroad Co.'s Elevator, Baltimore, 250,000 bushels.

Pennsylvania Railroad Company's Elevator, Baltimore, 1,000,000 bushels.

#### EAR CORN ELEVATOR.

The accompanying pictures are of plans made by the Burrell Engineering and Construction Co. for an ear corn storage and handling plant erected in connection with the elevator of the Farmers' Grain Co., of Illiopolis, Ill. The original elevator was figured on some four years ago by the contractors of this plant, but owing to the fact that a local carpenter underbid them, they lost the contract at that time.

It is now plain to be seen that the reliable con-



#### BILL OF LADING PROTEST.

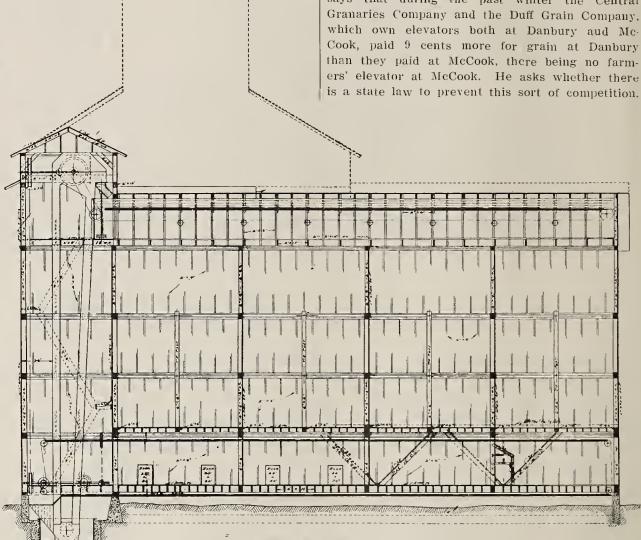
The uniform bill of lading matter is still before the Commerce Commission; and on May 1 a protest was filed on behalf of shippers against a proposed increase in freight rates by the railroads because of the liability of initial carriers for all freight shipments, provided in a new bill of lading.

To all this Geo. F. Brownell of the Erie Railway objected to the Commission, alleging that the shippers were violating an agreement with the roads entered into before the passage of the rate law, which should now become a part of the understanding. He said that this amendment should not be read into the agreement until it had been

interest. It is for this reason that efforts are being made in Congress to give the Interstate Commerce Commission such power as it needs so that it can enforce the kind of bill of lading which the railroads must use. The great question is to get a uniform bill of lading that will satisfy shippers and be fair to the railroads.

#### "STILL HARPING."

The secretary of the Beaver Valley Grain Company at Danbury, Neb., on April 14 filed a complaint with the Attorney-General at Lincoln against the Nebraska Grain Dealers' Association, alleging that members of the said association, in an effort to deprive him of business, are paying several cents more for grain at Danbury than the market price, and much more than they pay at their elevators in other towns where they have no competition. To be specific, Secretary Godown says that during the past winter the Central Granaries Company and the Duff Grain Company, which own elevators both at Danbury aud McCook, paid 9 cents more for grain at Danbury than they paid at McCook, there being no farmers' elevator at McCook. He asks whether there is a state law to prevent this sort of competition



AN EAR CORN ELEVATOR BY THE BURRELL' ENGINEERING AND CONSTRUCTION COMPANY.

tractor who knows what is needed by his clients and who does his work right, on a fair margin of profit, is pretty sure to be sought the second time, after the owners have had the experience of getting a cheap building at a cheap price.

The elevator shown in the sketch is 20 feet wide by 76 feet long and about 30 feet high. It is equipped with four Constant Chain Feeders and one elevator leg, fitted with 17x7 cups. The power for this elevator is taken from the main line shaft by means of a rope drive.

The elevator was built as well as designed by the Burrell Engineering and Construction Co., Chicago.

The production of denatured alcohol for the first six months of 1907, under the new law covering its manufacture, amounted to 1,774,272 gallons, says the Scientific American. The supplemental new alcohol law will, it is estimated, lead to a production of 4,000,000 gallons for the calendar year. The operation of the law has already reduced the cost of wood alcohol from prices varying between 60 and 75 cents to 30 cents a gallon, a fact which amply indicates that a fairly efficient monopoly has been established in the wood alcohol business.

passed upon by the Supreme Court as to its constitutionality. Levy Mayer of Chicago, on behalf of the shippers, held that any law of Congress must be presumed to be constitutional until decided otherwise by the courts, and insisted that the railroads accept it.

The House committee on interstate commerce also has been giving some attention to the matter of the bill of lading. Chas. Taft, a brother of Secretary Taft, representing a number of commercial bodies, as well as the Bankers' National Association, submitted to this committee a comprehensive brief, while Harry Dowie, a New York produce man, showed the committee no less than six different bills of lading over the Wabash road which were short of the commodities called for in the document, and on which drafts had beeu paid. He made a very strong plca for a reform in bills of lading advocated by the various organizations, and it is believed that such a great amount of evidence has been furnished that the committee will be impressed.

It seems to be the impression, says the Produce News, that the Interstate Commerce Commission has power only to recommend a proper bill of lading and that the railroads need uot follow out these recommendations unless it is to their lettsville, Texas.

Attorney-General Thompson believes the King discrimination law does not reach the case, but that the general anti-trust statutes may apply. He said if the complainant would give him the particulars of the case he might be able to give an opinion.

The King bill passed by the last legislature prevents corporations from selling any commodity at a lower rate in one section of the state than in another, after making due allowance for transportation, but it is silent on the question of buying any product and paying therefor a higher price in one section than is paid in another. The Junkin act passed in 1905 contains a similar provision, but the Junkin act also contains provisions against combinations or conspiracies to monopolize trade or to restrict trade. The former Nebraska Grain Dealers' Association was enjoided from continuing in operation by an order obtained by Senator Norris Brown when he was attorney-generai, who instituted his suit against the association not under any one section of the statutes but under the various anti-trust laws of the state of Nebraska,

Early corn was in tassel at April 19 about Hallettsville, Texas.

#### GRAIN ELEVATION CASE RE-OPENED.

The Commerce Commission in an opinion by Commissioner Harlan in April issued a supplemental report "in the matter of allowances to elevators by the Union Pacific Railroad" as follows:

"From numerous protests and complaints that have reached the Commission since the handing down of its last decision in this proceeding on April 9, 1907, it is apparent that there has been a wide extension among interstate carriers of the payment of the so-called elevator allowances on shipments of grain, and that there is a general feeling that the practice results in an unlawful discrimination. The Chicago Board of Trade and other interests largely concerned in the shipment of grain have asked for the further consideration of the matter. Under these circumstances we have concluded in the public interest to reopen the proceeding and to set it down for further argument on May 8 next in the hearing room of the Commission at Washington. Of this action the parties hereto have already been advised. It seems unnecessary to take further evidence and the matter will, therefore, be considered on the present record. It is the desire of the Commission that counsel shall again argue the general question of the legality of the contract of the Union Pacific Railroad with Peavey & Co. and the lawfulness of the allowances that are made to the latter company at Council Bluffs and Kansas City under the terms of that contract.

"In connection with the re-examination of these general questions the Commission desires the benefit of the views of counsel with respect to two points which have been strongly urged upon our attention and which may be stated briefly as

follows:

"1. The clipping, cleaning, grading, weighing and mixing of grain are services that have no relation to transportation, but are of commercial advantage to the shipper of the grain. If performed or paid for by a carrier at one place where it has put an elevator under contract, as with Peavey & Co. at Council Bluffs and Kansas City, is it not an unlawful discrimination not to perform or to pay for similar services elsewhere on its line?

"2. Wheat and other grains are dealt in upon the great grain markets of the country on fractions as small as one-eighth of one cent per bushel. A fluctuation of that amount often suffices to effect or prevent sales. And slight differences in the transportation rates are sufficient to turn a movement of grain from one market to another. In other words, no commodity that enters so largely into the commerce of the country is more sensitive than grain to fluctuations in price or rates. If, therefore, a shipper receives from a carrier, in connection with the transportation of his grain, any service or privilege that results in a benefit to him to the extent even of a small fraction of a cent per bushel, it gives him an advantage which can readily be turned to his profit. While some grain is taken directly to the mills, the bulk of the traffic must pass either through public or private elevators. A grain market can be maintained only by the use of elevators. A grain dealer must, therefore, have his grain unloaded into a public elevator and pay its storage charges, or must handle it in his own elevator and pay the cost of operating it. In other words, Peavey & Co., for the successful conduct of their business as dealers in grain, must either use a public elevator or provide themselves with one of their own. In either event a substantial expense item is involved.

Upon these facts it is insisted that a contract, such as the one here involved, when made with a dealer in grain who handles his own wheat, results in an unlawful discrimination, whatever may be the amount of the allowance and whether it be in excess of the cost of the service or not; for, as Peavey & Co. cannot conduct their business as grain buyers and dealers without using a public elevator and paying its charges, or without owning their own elevator and paying the cost of operation, any amount, be it small or large, contributed by the Union Pacific Railroad to the cost of running their elevator must necessarily operate, pro tanto, as a special concession in their favor. It is contended that any aid received by them from the Union Pacific Railroad. whether sufficient to cover the cost of running the elevator or not, even though it amounts to but a small fraction of a cent per bushel, really results in giving to Peavey & Co. a benefit which, under the present tariffs of the Union Pacific Railroad, is shared by other grain dealers in business at Council Bluffs, Omaha and Kansas City, is, nevertheless, denied to grain dealers at other points on the line of that company. Such dealers have to bear the entire burden of running

their elevators or pay for the elevation service on their grain when performed by a public elevator. And this, it is earnestly contended, is not only an unlawful discrimination against them, but against the several communities in which they conduct their grain business.

"In rearguing the issues herein, counsel are requested to give some consideration to these suggestions."

#### OUR OWN SPECIAL REPORT OF THE PRO-CEEDINGS AT WASHINGTON.

At the re-argument of the counsel in the matter of allowances to elevators by the Union Pacific Railroad Co., commonly known as the "Peavey allowances case," Henry S. Robbins and W. M. Hopkins were present in the interest of the Chicago Board of Trade; Frank Hagerman and F. T. Heffelfinger, for the Peavey Company; Robert Dunlap, for the Atchison, Topeka & Sante Fe; Hale Holden, for the Chicago, Burlington & Quincy; F. C. Dillard, for the Union Pacific; J. C. Jeffery, for the Missouri Pacific, and E. E. Williamson, for the Cincinnati Chamber of Commerce.

Mr. Dillard stated that it was his idea that the new interests in the case should present their arguments first, and then that the former interests should reply.

Henry S. Robbins, for the Chicago Board of Trade, made a very brief argument. He stated that Chicago is interested in the case for the reason that allowances are made to Omaha and Kansas City in excess of the allowance made in Chicago, and this is in the nature of a discrimination against the Chicago market. He stated that he had been instructed not to argue along the lines of the legality or the illegality of the contract in the Peavey case. What he was present for was to ask that the allowance should be made the same in each case in the event that it is decided that these allowances should be made at all.

He further stated that at the present time Chicago has an allowance on outgoing grain of onefourth of a cent per bushel. The allowance made to the Missouri River points is three-fourths of a cent a hundred. This makes a difference on wheat of about one-fifth of a cent per bushel, and on corn almost that much, so that if the roads running to Omaha and Kansas City allow threefourths of a cent per hundred pounds at those points, and the Chicago grain dealer only gets three-fourths of a cent per bushel, and that only on the outgoing grain, which is about 50 per cent of all the grain reaching Chicago, the Chicago dealers are at a disadvantage to the amount of one-fifth of a cent on wheat and one-fifth or onesixth of a cent on corn. Chicago wants to do away with that discrimination. If the Commission should decide that the allowances are legal, then what is asked for is that there shall be a similarity between the charges at Chicago and at the other Missouri River points and at Omaha.

Commissioner Clements stated that the Commission had a right to expect that the parties asking to have the case reheard would be able to give some reasons for their interest in the matter. The Commission is confronted with the legality of the action and the practices under it and especially with reference to commercial elevation. He asked counsel to argue on the point—how it could be practiced without discrimination. This question is not only involved in the present case, but is constantly coming up before the Commission. The Commission is anxious to hear anything that may be said along that line.

F. C. Dillard in opening his argument for the contract stated that the Union Pacific felt that if an attack was to be made upon this contract, either directly or indirectly, it should be entitled to hear from those who are directing the attack, but the latter seem to prefer to attack from ambush rather than to come out into the open. As for himself, he stated that the case would be approached with great hesitancy, for, owing to the late date at which he was forced to take up the

matter, he had not been able to go into it with the clearness and accuracy which the importance of the question deserved. The Union Pacific claims that the contract with Peavey & Co, is fair, and that the Commissioners cannot overthrow it unless they subvert the law; they cannot declare the contract invalid unless they go directly in opposition to the language of Congress. In arguing the case in view of the new rate law, he said, it has been laid down by the Supreme Court that freight charges shall not be unjust or unreasonable nor unjustly discriminate so as to give undue preference or advantage under similar circumstances. The act to regulate commerce, under which the Commission has authority, leaves the common carrier with the same rights that it had under the common law. There seems to be a prevailing idea that the interstate commerce law has introduced something entirely new; that the law came in to overthrow the common law. That is not true. The principles of the law existed, in the main, prior to the time of the passage of this law. Before this time, if unreasonable rates were charged, there could be an action at common law; if there was unreasonable discrimination the law could reach it, but it was not able to do so promptly and it was for this reason that the interstate commerce law was passed. Under this law the carriers have the same rights they ever have had to make contracts to carry out their business, to classify their freight and make their rates and to do whatever else is necessary to the building up and conserving of their business interests.

Taking this stand, the query which presents itself is this: Is elevation necessary to transportation? Is the maintaining of an elevator at Omaha, another at Kansas City, and the putting of the grain through those elevators a part of the transportation or a necessary facility, or aid, or help to a railway in the conduct of its business? If it is, and it does not lead to discrimination, then there can be no question of the propriety of the thing which is done. Is elevation a part of the duty of a carrier to the public? Is it necessary to the proper conducting of this business that there should be elevators and the carrying of the grain through them?

[At this point Mr. Dillard referred briefly to the testimony offered at the previous hearings, showing that these elevators, or transfer houses, are indispensable to the handling of the grain; that the evil was in the excessive allowance for running the grain through the elevators. Railways must either use those houses built by others or build them for themselves. He referred to the Budd case, in which it was decided that the business of elevating grain is indispensable to the carrying of the grain; that it is the performance of an essential duty and service incident to transportation. The elevator is a link in the chain of transportation.]

The finding in the case up to this point should be that the carrier has the right to make contracts looking to the proper conduct of its husiness; that an elevator is a necessary link in the chain of transportation; that the work which the carrier is called upon to do in this connection cannot be properly done without elevators. To return to the scoop and shovel rather than to use the elevator would be like leaving the Pullman car and returning to the old-fashioned stage coach. It is a necessary element and a part of the transportation. It was held, long before the passage of the interstate commerce law, that the manner and means of discharging this duty were within the discretion of the carrier, and that the shipper or consignee could not control this any more than he could control the mode of the construction of the engine that carries the cars or the kind of fuel it chose to use in firing its engine, nor can it be said that this constitutes a monopoly any more than it can be said that a contractor is forming a monopoly when he contracts with a number of laborers to do his work for a certain price.

It should also be considered whether a contract entered into in good faith should be lightly set aside. This is a contract by which hundreds of thousands of dollars have been spent by the Peavey Company. This power should be exercised only in cases which are free from doubt. It is a question whether this case is so free from doubt, seeing it has twice been before the Commission already. The real question before the Commissioners is not whether you will permit allowanees elsewhere, but whether or not you will hold the Peavey contract to be invalid and that what is done under it is unlawful. The courts do not grant indulgences or absolve from valid obligations. This Commission cannot annul a contract unless it likewise annuls the law.

At this point Mr. Dillard entered very fully into the passage of the law and its amendments and held that the latter were, in part, the result of the Peavey contract. Then he said that from the beginning of this Government it has been held that a man may follow any occupation that he sees fit, unless it is contrary to some specific declaration of the law. The Commission has no right, because the man is an owner of grain himself, to stop him from making contracts with a railroad company. Under the law a railroad has a right to make contracts which result to its benefit, provided they are within the limits of the law. With reference to the U. P. situation, Kansas City and Omaha are the termini of its road; if you say it has not the right to make these contracts, then the U. P. would have to erect these elevators of its own; it would be able to store only for a very limited time; its revenues would be cut down; it must have facilities for holding grain over until it can be taken on further to its place of future consumption. This is a through shipment and it has been so held by the Commission.

It must be remembered that the interstate commerce law had to accept conditions as it found them. The elevators hold grain only at these terminals until it is needed further on in the commercial eenters of the country; it is strictly a through shipment and there is no reason why it should not be so treated. No eharge is made for clipping, cleaning, etc. What is charged is merely the charge provided by the statute. It is paid only on the ground that the grain is intended to pass through Omaha or Kansas City to its destination further on. There is no question that if it were to be passed on immediately the railway would have the right to pass it on from car to car with secop and shovel. The method must be in accordance with modern conditions. This is the work of the elevator, and it may be neeessary that grain should be held for a certain length of time before the transfer takes place. If the Commission should hold that this is not free passage, then it will hold that the railroads may not adjust themselves to the existing exigencies of eommercial conditions. This is truly and properly a transfer service at the terminal lines of these railways, and the railway which does not reach the consuming market, which does not reach markets where terminal elevators are established, may at its aetual termini establish elevators. A railroad, under the law, has the right to employ any person its sees fit to transfer this grain; the faet that the person so employed owns grain of his own has nothing to do with his successful performance of this service. This does not eonstitute a discrimination. The act must be applied to the particular condition of affairs existing. What is said in the law is that you must make no allowance in exeess of what is fair and just for the service rendered. The railroad eompany can employ anyone to do this service for it, provided the charge for so doing is reasonable and just, that is all that the law says with regard to the matter-it places no restrictions as to who shall be employed to do the service.

Mr. Jeffery, on behalf of the Missouri Pacific, said that the allowances should be taken up separately and it should be determined by the Commission what would be just and reasonable in each case.

Mr. Hagerman, for the Peavey Company, stated that he was there for the purpose of presenting a concrete ease. He stated that by the late amendment of the interstate commerce law the Commission has been invested with a power equal to almost any body in the land, and in the eon-duct of these cases there must be no individualism of opinion. The Commission should be stable in its opinions. There should be ever before it the feature of permanency. It can be no more a law unto itself than can the Supreme Court. If the Commission shall waver, then whenever there may be a vacancy on the Commission there will be a clamoring by particular interests that some one favorable to them should be appointed.

Mr. Hagerman went very fully into the history of the Peavey Company and called attention to the fact that if cars are permitted to go eff the lines of the U. P. railway there would be always a car famine, as the roads getting them will not return them so long as they have a use for them. This has already been demonstrated before the Commission. The Peavey investment was made at the solicitation of the U. P. Railway, and it was the investment of a large sum of money. It was in the interest of the railway to have the facilities named. The contract has never been a secret. As far back as 1902 the public generally knew that this contract was in existence, and it was freely discussed by almost every newspaper in the land. The Commission itself instituted the investigation of the Peavey Company in 1903. The result of that investigation was that the Commission then decided that the contract was made in good faith; that it was absolutely essential; that no railroad could get along without it; that it was absolutely necessary to have these elevators. This Commission then said that the arrangement was lawful, legal, reasonable. That was the situation on June 25, 1904, that stood as the rule, and under that ruling other railways to the Missouri River considered that they were justified in going ahead and building elevators for themselves, it having been held that wharfage charges are ineident to commerce and not a part of the commerce itself. Mr. Hagerman touched on the incidental features with reference to insurance, to logging, to the stock yards at Kansas City, to the cattlemen, to the cab service, all of which have been held by the courts to be a part of the service to be renderedmerely a facility of that service. It was upon the Peavey case that Congress was asked to pass the legislation, which it did pass in 1905. The amendment in Section 15 gave exactly what the Commission asked for and almost in the words of the recommendation made by the Commission in asking for this legislation. You asked for the power to see that a charge was reasonable and said if that power was given you would see that no unreasonable eharge was adopted. There was no provision in the law for the foreing of the furnishing of a facility.

The main plea made by Mr. Hagerman was for permanent action on the part of the Commission. He stated that whenever the Commission should adopt a policy of wavering or reversing itself it would be considered as unstable. There is nothing wrong with this contract or with the business being done under it; it is only that some are trying to get something to which they have no right. The Commission has twice said that it was right, and it has no right now to change that opinion.

Permission was granted by the Commission for all parties interested and who might desire to do so, to file additional briefs within ten days' time.

A. F. T.

#### THE PRESS REPORTS.

The Record-Herald correspondent at Washington says of the above arguments on May 8:

For the fourth time within the last four years the important Union Pacific-Peavey Elevator case is before the Interstate Commerce Commission. It was reopened to-day upon motion of the Chicago Board of Trade. The case was first decided June 25, 1904, when the Commission held that the contract between the Union Pacific and Peavey Company for the establishment of grain elevators at Council Bluffs and Kansas City was not illegal. The railroad paid Peavey & Co. 1¼ cents a The Atchison, Burlington and Rock bushel. Island Railroads had the case reopened, charging that the payment was a rebate. The Commission required the railroad to reduce its payments to three-quarters of a cent a bushel. The Chieago Board of Trade last November brought the case before the Commission for a third time. The questions argued before the Commission today were whether it is not discrimination for a railroad to refuse to give elevator service to all shippers at all points desired, and whether it is not rebating to pay any shipper for elevating grain a part or all of which is his. The Chicago Board of Trade, without offering any explanation, to-day withdrew from the case.

Among other things, the Tribune's correspondent said:

Caustie eomment from the bench to-day was a feature of the Interstate Commerce Commission hearing of a new chapter of the case involving allowances to elevators by the Union Pacific Railroad Co. The eomment, from one of the Commissioners, was directed in a delieate way toward the Chicago Board of Trade mainly, on whose account the Union Pacific elevation case had been reopened, and which organization, by special permission, had been allowed to become an intervening complainant.

Henry S. Robbins, general counsel for the Chicago Board of Trade, represented that organization. It seemed to be the impression of the Commission that the City of Chicago was deeply interested in the elevator allowances by railroads on shipments of grain, and that counsel for the Chicago Board of Trade would probably appear before the Commission to deliver enlightening argument.

Mr. Robbins, however, came to Washington merely to make a short assertion as to the way the Chicago grain people feel concerning the practices of railroads in making elevator allowanees, and having thus assumed the role of complainant by so asserting, he sat down.

The Commission, even in its order reopening the case, stated that it had a strong desire to receive the benefit of the views of counsel on various points. When Mr. Robbins completed his statement within a few minutes, it was apparent that the views expected must eome from other complainants present and from attorneys of railroads.

One Commissioner could not refrain from expressing gentle surprise over the fact that such a good grain eenter as Chicago did not take more interest in the case it was to its benefit to see

The Commission was apparently deeply interested in the matter on its own account and the Commissioners by their questionings gave evidence that the elevator allowance of three-quarters of a cent in force on Union Pacific lines, even though it stands as a reduced figure, still has the nature of a rebate in the estimation of the Commission.

Be a student and a scholar of your business. The interchanging of ideas among different elasses of vorkers, as merchants, bankers and professional men, is more prominently established in the countries where civilization has made the most progress. As one great writer said recently, "The American people are noted for their habit of getting together and talking things over."—Harry W. Kress.

For Russia to import wheat is like "earrying eoals to Newcastle," but on April 30 Duluth sold 240,000 bushels of durum wheat to go to St. Petersburg. "According to trade memory," says the Minneapolis Tribune, "Russian importation of American-grown wheat has occurred but once before. It was particularly interesting as showing the striking peculiarities of Russia. Only a week before the export movements from the ports were the largest in many months, which would indicate a surplus, and then came the news that they are importing wheat."

# UP-TO-DATE WEIGHING MACHINERY.

One of the questions which does not always get the attention it deserves is, what system of weighing to make use of in an elevator. There are now happily few elevators which attempt to carry on business with no scales at all, though they are not unknown, but there are many elevator owners who are satisfied apparently with antiquated weighing instruments, which belong to the past generation and are certainly not in keeping with modern business methods.

It is to the interest of every grain dealer to have a good weighing system; for without it he is bound to be dragged into endless disputes over weights and to incur losses through inaccurate records. While there are few firms who have not some sort of scale for checking the weights of grain received, there are a large number who

-that is to say, when a dispute arises over weights. Supposing a discrepancy is shown, for example, between terminal weights and those recorded in a country elevator. The terminal elevator may have sufficient proof of the accuracy of its record, and the grain dealer may be quite sure of the correctness of his own weights, but the railroad will not pay for leakage without proof, and it is not easy to prove that a hopper scale was weighing absolutely correctly, or that the weighman is infallible. It is such an easy thing for the weighman to put down a draft too much or too little that he is suspected of making an error whenever there is a discrepancy which is somewhere near the weight of a draft.

It is principally for these reasons that autoscales have been so warmly welcomed in all the grain growing states, and are being rapidly introduced into all up-to-date elevators. What the



AN AVERY ELEVATOR SCALE AT PORT COLBORNE THAT WEIGHS THREE TONS IN A SINGLE DRAFT.

are without scales for weighing out (although) this is of equal importance) and many more who have scales that cannot be thoroughly relied upon. Shippers in this position are at a heavy disadvantage whenever a dispute arises over weights, and are practically at the mercy of the railroads, or the receivers' scales and the receivers' honesty. If a shortage is claimed, it has to be made good in one way or another, though the other man's figures may be wrong; and if they are correct, the loss may be due to car leakage. Cars may be overloaded and grain confiscated, and money is lost in many other ways. In addition, the dealer never knows just where he stands at any part of the season and is kept guessing all the time.

The lack of proper facilities for weighing is not so much due to unbusiness-like methods on the part of elevator owners as to the fact that until recently there had not been anything on the market which properly met their requirements. Up to a few years ago the grain dealer who wanted scales had little choice but to install a hopper scale, and in many cases these have proved anything but satisfactory. They are cumbersome, are liable to be out of adjustment, and require a good deal of attention to keep them in perfect condition. Even if they are weighing correctly, they fall down just when they are needed

grain dealer has been looking for is a machine which would not require much attention, would not easily get out of adjustment, would give accuracy, and would prevent mistakes. A few years ago it no doubt appeared that he wanted rather too much, but he is certainly now able to obtain scales that will do all the work of weighing and do it a good deal better than it was formerly done by hand.

We reproduce above an illustration of the automatic grain scale manufactured by the Avery Scale Co. of North Milwaukee for use in elevators, a machine which is now widely used throughout the country and much in favor with elevator owners. This is a machine which requires no labor to operate, which makes its own record of the weights, and which the makers guarantee to weigh to an accuracy of well within one bushel in 20,000 pounds of grain, and to keep absolutely reliable records. The scales are made in all sizes, from ten pounds to three tons per discharge. The eut shows a scale of three tons' capacity, such as is at present being installed by the Canadian government at their new terminal elevators at Port Colborne. Eighteen machines, each of this capacity, equaling 12,000 bushels per hour, have now been shipped to Port Colborne for these elevators.

The Avery Scale Co. is a Wisconsin corpora-

tion, who obtained a few years ago full selling rights in this country over all scales manufactured by the well-known English firm of W. & T. Avery, Ltd., who have been manufacturing scales of various kinds ever since 1730 and whose weighing machines are in use in almost every country, civilized and uncivilized, in the world. The American firm has a very up-to-date plant at North Milwaukee, where automatic scales are made in large quantities for shipment to all parts of the country.

This automatic scale undoubtedly solves a great many of the problems of grain dealers, as it gives them exact weights and puts them in a position to prove the correctness of their records. The machine is an equal-balanced scale, weighing against standard weights, and a balance is shown on every weighing. This not only means simplicity of construction and freedom from errors, but it enables the dealer to be absolutely sure of his weights. He can make a simple test in a few seconds, by observing the balance, and so long as it balances correctly, there is no risk of error. It is a machine which is very easily adjusted to different grains and different grades of grain by means of a small adjustable weight, which can be put into position with no trouble whatever.

The Avery Automatic Scale is the result of long experience with the requirements of grain dealers, and it has also seen a great many years' service. Although it has only recently been introduced into America, it has been on the market in Europe for nearly twenty years, where it is very well known. The large grain docks at London and Liverpool were equipped with this type of weighing machine more than ten years ago, and practically all of the grain imported is weighed over Avery Automatic Scales. As is well known, there is comparatively little grain grown in England itself, so that nearly 80 per cent of the grain annually consumed by the 45 million inhabitants of the British Isles is weighed by Avery Scales.

A visitor to the factory of the Avery Scale Company is very much impressed by the extensive testing apparatus with which the erecting shop is equipped, and which illustrates the importance which this firm attaches to the reliability of their goods. The testing apparatus consists of three elevators, the two larger of which have a combined capacity of more than 10,000 bushels per hour. A large storehouse of materials is kept, so that every scale can be tested on the material which it is destined to weigh, and every machine has a long run, under supervision, operating under actual working conditions, before 'shipment.

A new list has recently been issued by this firm referring particularly to the requirements of elevators and mills, which they will be glad to send at once to any one interested, addressing the Avery Scale Company, North Milwaukee, Wis.

#### A REMINISCENCE.

The self-murder of Charles Coster on April 27 and the failure in New York City of the Stock Exchange firm of Coster, Knapp & Co. for \$1,800,000 on April 29 revives the recollection of older men of the Chicago Board of Trade that Coster once cut a figure on that exchange.

In May, 1892, Coster was trying to run a corner in corn, his firm being Coster & Martin, known as the "boy brokers."

"Memorial Day was the thing that broke Coster," said a Board of Trade man in talking over the story to the Daily News. "He drove the price of corn up and up and seemingly nothing could stop him. There was apparently no corn in Chicago. There was none to be had on short notice. The boys apparently had things cinched. When the pit closed on Saturday, May 28, they were lords of the situation. But they had over-

looked the fact that on Monday came Memorial Day and they could do no trading. Saturday afternoon passed and Sunday and Monday. It rained all three days. Tuesday morning opened with corn at \$1, in a humidity so dense that the air seemed like a lot of wet postage stamps, all sticking together. At 10 o'clock corn was at \$1. At 11 o'clock, still dollar corn. At 11:15 the pit was pandemonium. Then an uneasy streak struck the crowd. Someone had taken one of the Coster checks to the Bank of Montreal and it had been dishonored. That finished things. At 11:30 corn was selling at 58c and Coster was "dead broke."

#### BUCKET-SHOPS AND LEGITIMATE BOARDS OF TRADE CON-TRASTED.

[The following very excellent and closely drawn parallel between the legitimate Boards of Trade and bucket-shops is taken from an address made by George F, Stone, secretary of the Chicago Board of Trade, before the convention of the Ohio Millers' State Association at Columbus, April 15.]

A bucket-shop is a pretense; it pretends to transact business, when, in fact, it exercises no commercial functions and it is devoid of every commercial feature. It is a deliberately premeditated organized fraud. It charges for its service when no service is performed. It merely weaves its weh and watches for its victims; it is a gambling contrivance pure and simple. It is thoroughly demoralizing to industrial and mercantile life. It pollutes everything it touches and taints everybody with whom it is in any manner identified. It is insidiously pernicious and undermining and is at war with every legitimate industry and every principle of mercantile life. It is a scheme for betting upon quotations under the flimsy guise of commercial transactions.

The bucket-shop takes one side of the bet and its customer the other side. If the customer wins, the bucket-shot must lose. If the bucket-shop makes money, it must follow that the customers lose money. To put it in another way, it is for the interest of the bucket-shop proprietor that his customers lose money. It is for the interest of legitimate merchants that their customers make money. The profits of the bucket-shop are derived from the losses of their infatuated customers. The impoverishment of their customers means the wealth of the bucket-shop; and yet, strange to say, knowing this, their patrons eagerly enter the unequal contest.

The bucket-shop bears the same relation to legitimate commercial bodies that a counterfeit bears to a genuine bill. Nothing is bought or sold in a bucket-shop. The keeper thereof simply deals a game against his victims. The sole and only excuse for associating its operations with the system of future trading is because it has selected the fluctuations in prices of the grain and cotton markets as the issues upon which it makes its bets.

In contradistinction from the hucket-shop stand legitimate commercial exchanges or boards of trade.

The commercial exchange has no personal or corporate interest to promote. Its prosperity is and always must he in proportion as it fosters the general welfare, and as it extends and multiplies commercial transactions upon the basis of maintaining a fair compensation for labor, mental and physical, in the field, shop or market. Its obvious interest is that which attaches to a great public servant summoned to service by the inexorable call of a constant public necessity.

J. A. Heath, of the Richmond Elevator Co., Richmond, Lenox, etc., Mich., recently made for his company a large importation of field beans to fill orders. This fact reminds us that during March, 1908, there were imported 216,188 bushels of beans and dried peas, valued at \$308,881, against 28,291 bushels, valued at \$51,196, in 1907. The imports of these vegetables for the nine

months ending with March were more than double in quantity and value the imports for the previous year.

#### J. F. YOUNGLOVE.

J. F. Younglove of the Younglove Construction Co. of Sioux City went first to Sioux City in 1884. The city was then "en boom," as the French might say—a happy state of affairs that subsequently "busted;" and Mr. Younglove went up with the explosion. He was doing a general contracting business, and the "bust" split him "wide open," as it were. Borrowing money enough to get out of town, he located at Mason City in 1893, at a time when a national panic added to the business complications in Iowa and left him—like others—little real opportunity to get a foothold for several years,

In 1896 the grain and elevator men began to notice that they were at too much expense in handling grain; and it soon became certain that improvements must be made and more modern and up-to-date methods adopted. Mr. Younglove thereupon took up the study of the ways and means to accomplish this as deeply as possible at



J. F. YOUNGLOVE.

the time, neglecting his other business in order to perfect himself in this line of construction. There was not much activity in the elevator building line, however, until 1899, which was a very good year. But the close of that season he found he had contracted for more work than he could possibly handle, whereupon he took in as a partner Mr. H. G. Bushnell, then traveling for the Pease Manufacturing Co. Mr. Bushnell had had no experience along the clevator construction line, but he was well educated, was an expert in his line and thoroughly understood the routine of office work. He assumed the duties and responsibilities of an office man, leaving Mr. Younglove free for the road and superintending and soliciting new work.

In 1900 they took in Mr. J. W. Boggess, Messrs. Boggess and Younglove being the solicitors and superintendents of construction, leaving Mr. Bushnell office manager.

They did a very good business in 1900, but at the close of 1901 it appeared that the business management had not been properly taken care of, owing to lack of experience; and the company was reorganized, Mr. Bushnell selling his stock to Mr. Younglove at par. At the same time Mr. Younglove induced another stockholder to sell his stock, which left the business in the hands of himself and Mr. Boggess, the latter owning one-third of the capital stock. Upon looking after the company's affairs it was found they were heavily involved, the books showing \$15,000 indebtedness, all occurring from the business of 1901.

As he had invested all that he owned and could borrow in this business, Mr. Younglove notified their beaviest creditors of the company's affairs and invited them to go over the books, which they did. As there was nothing to be gained by foreclosing, they accepted notes of the company, personally signed by Mr. Younglove, payable

monthly, for the amounts due them, and in January, 1904, the company was out of debt, and had some \$4,000 to \$5,000 cash balance on hand, or about the amount of the capital stock paid in. Mr. Boggess then became dissatisfied with business on the basis of the stock distribution, and, as they could not arrive at an agreement, Mr. Younglove finally sold to him. He continued the business in the name of Younglove & Boggess Co. for about eighteen months, when the concern went out of business.

Mr. Younglove, in the meantime, organized the Younglove Construction Co., which, within the year, has removed to Sioux City, not because it is particularly suited to the elevator construction business, for the company, previous to the removal, had been doing about all it could handle for the previous several years, but because it is an excellent location for the distribution of elevator and mill supplies, including grain cleaning machinery, powers, plants and supplies, scales, etc. Whether Mr. Younglove's judgment in this was clear and sound will be proven at the termination of the current year. As to the general principles upon which the company's business is conducted, he says: "I have learned through experience that the only way to successfully carry on business is to satisfy the people; and I have bent every effort and endeavor in that direction since starting for myself. I believe I have been successful, as I can say that all the people for whom I have built are satisfied customers."

# [For the "American Elevator and Grain Trade."] GRAIN MOVEMENT AT TOLEDO.

BY H. L. SPOHN.

The recent shipments of No. 2 Red wheat have been the heaviest from Toledo that they have been for many months. Practically all the available supply at this point was wiped out a few days ago, and for a time it was very questionable where the wheat was to come from to fill contracts for May deliveries. The Paddock-Hodge Company alone shipped out more than a quarter of a million bushels within the past few days, most of which went to New York. While some small part was intended for export trade the bulk of it was for the use of the millers in that section. Heavy rail shipments were also made to points in Pennsylvania, West Virginia and Ohio for the use of the scattered millers in that section. Orders were abundant on all sides, even coming from points in Michigan, a thing very unusual on this market. One order from Detroit for 10,000 busbels was turned down because it was found impossible to find the wheat to fill it. The farmers simply would not sell and the millers were at their wit's ends to secure sufficient wheat even to meet their limited requirements. Few of the mills are running more than half time and many of them are not running at all, as there is a dearth of flour orders at the present time.

With the advance in the price of wheat there came a change in conditions. The effect of the raise was twofold. In the first place, the millers refused to buy at the increased price and the demand immediately shut off. In the second place, the farmers fell over themselves in an effort to land their wheat on the market before a decline was noted. The outcome of it was that the available supply on the Toledo market begun to swell rapidly and instantly, until there is now, May 9, in the neighborhood of 150,000 bushels of avail able wheat on hand again, and this is increasing at the rate of from 15,000 to 20,000 bushels per day. Those who a few days ago were considerably worried about where their May wheat was to come from are again resting perfectly easy, as there is once more plenty in sight. The small mills throughout the state are finding little use for wheat now because of the extreme dullness in flour and the bulk that is being unloaded by farmers is finding its way directly to the large trade centers. With the present flattering pros-

pect of the growing crop, which is the best for l many years, farmers are disposed to sell substantially all the wheat they have on hand at the present high price and take what little risk there may still be on the new crop.

Oats also have enjoyed a fair trade recently and the receipts have been somewhat more liberal than they were for a while. There has been nothing here for export trade, as the local people found it a task to even supply the demand on the Eastern market, which has filed many orders for Toledo shipments. May prices on the local market are ranging around 53 cents, September about 37 cents and July around 47 cents. As only from thirty-five to fifty cars per week are coming in now there is a ready market for all that shows up. Reports from this district show at least the normal acreage for this year and the present prospect is all that could be expected.

There is scarcely a car of Ohio corn to be had here, but a fair amount of Western corn is coming in, the receipts approaching 100 cars per week. The quality is splendid, and prices run from 64 cents for September corn to 68 cents for cash. Farmers are finding no difficulty with their seed corn, but a much larger percentage of the smaller corn is being planted. The acreage may be a trifle short because of the generally unsatisfactory crop of last year, but the shortage, if any, will not be material. There is something over a quarter of a million bushels of available corn on this market. Ground is in splendid shape for the planting of the new crop.

Numerous complaints have been heard recently from the grain men of central Ohio and other parts of the state, alleging unfair freight rate discrimination in favor of Chicago. According to members of the local Produce Exchange these complaints are unfounded, and while the rates might appear to be unjust it is said a close examination will show that the Ohio shipper is as well taken care of as could be expected. Aecording to the claim of one of the grain dealers from down state, "the freight rate from Effingham, Ill., which is in almost a direct line south of Chicago, is 151/2 cents to Pittsburg, while the rate from Chicago to Pittsburg is but 91/2 cents, a difference of 6 cents per hundred pounds, to which Chicago is not entitled. The rate from Piqua, Ohio, to Baltimore is 131/2 cents, against 12 cents from Chicago to Baltimore, though Chicago is about 300 miles west of Piqua." The protests of the Ohio men resulted in an indignation meeting, which was recently held at Piqua, and the affair was freely discussed. Jesse Young, Frederick Mayer and Henry L. Goemann of the local Exchange attended the meeting. Little was accomplished except the pouring of some oil on the troubled waters, and there is still considerable dissatisfaction relative to the matter. A handsome new photographic group now

adorns the wall of the local Produce Exchange. It came as the gift of Frederick Mayer, who, after much effort, succeeded in securing the photographs of the presidents of all the leading grain exchanges in the country for the year 1907. In a neat little speech Mr. Mayer presented the gift, which was received with a vote of thanks to the generous donor. Comprising the group are Henry B. Schrieber, New Orleans; John F. Crocker, Boston; George H. Plant, St. Louis; Hiram N. Sager, Chicago; James L. King, Philadelphia; Henry D. Winters, Buffalo; William Harris Douglas, New York; Frederick Mayer, Toledo; William J. Mooney, Indianapolis; Thomas A. Grier, Peoria; J. D. McMillan, Minneapolis; John Wynn, Jr., Detroit; Julius H. Barnes, Duluth, and T. J. Brodnax, Kansas City. Several of these gentlemen had not had a photograph taken for many years and it required no small amount of diplomacy to induce them to submit to the ordeal.

The Ohio Milling & Elevator Company at

Marion, Ohio, is now in the hands of a receiver, that action having been taken by the local courts some time ago. This developed the fact that Lorin J. Smith, former manager of the coneern, was short in his accounts to the extent of about \$5,000. The amount is covered by a bonding house and there will be no loss to creditors from this source, it is said.

The coming marriage of Henry L. Goemann, a prominent young grain man, and Miss Edith Philo of Chicago has been announced. The wedding will occur in June and the young couple will make their future home in Toledo, where the groom is extensively engaged in the grain business.

John Rend, a grain and hay dealer at Deunquat, in Wyandotte County, some time ago secured a verdict of \$2,000 against the Toledo & Ohio Central Railway Co. for alleged discrimination in not furnishing cars to care for his business. The judgment of the lower court was recently reversed by the Supreme Court and the case remanded for a new trial.

A new elevator will be erected at Frederick-

mand being so much larger than expected that the amount sent to each had to be reduced. The Chamber of Commerce of Davenport offers a prize of \$100 to the farmer who will produce the best half acre of corn.

#### A MASSACHUSETTS ELEVATOR.

The mill and elevator shown in the engraving, owned and operated by W. H. Cunningham, is a recent addition to the business premises of Malden, Mass., although Mr. Cunningham's business was established as long ago as 1870. He is wholesale and retail dealer in grain, hay (both Michigan and Eastern), flour and potatoes, and the plant as shown is a long-needed equipment of his business, as well as eonvenience to his city patrons. It is the first plant of its kind ever built in Malden. It is located at Oak Grove Station on the Western Division of the B. & M. R. R. and has all the conveniences of railroad sidings, etc. The storage capacity is 40,000 bushels of small grain, with a 165-foot storage building for hay, flour and feed.

The mill was equipped by The Fairbanks Comtown, O., ground for the purpose having been pany of Boston, Mass., with one of the latest



ELEVATOR AND WAREHOUSE OF W. H. CUNNINGHAM AT MALDEN, MASS.

recently leased by the Northwestern Elevator & | Mill Co. of Mt. Vernon, O. Work will be pushed to completion as soon as possible.

Toledo, O., May 9.

#### STATISTICAL RECORDS.

The Cincinnati Press Current's "Statistical Annual" for 1908, by Charles B. Murray, editor, is now ready. The "Annual" is so well known to the trade this announcement is sufficient. The price is 25 cents.

"Year Book" for 1907, by the Market Record, the official paper of the Minneapolis Chamber of Commerce, compiled by P. A. Rogers, is now ready. It is a record of statistics, indispensable for all who must needs keep posted on market affairs of the Northwest in particular. Its general market information, however, covers a wide range.

The Washington State College Experimental Station's train lectures are responsible for a considerable acreage to corn in that state this season. It was demonstrated at the station that corn can be grown successfully and at a profit in that state, and that wheat grown on the land the next season produces equally as well or better than on summer fallow. The college offered a bushel of this corn for seed to any man who would plant it and cultivate it according to directions given by the experiment station staff. Several hundred applications for seed have been filled, the de- are harmless to man and other animals.

Elyria Gas Engines, also a Sprout-Waldron Receiving Separator that refans all oats and corn as unloaded from cars, removing all cob or foul grain that is not taken out at the Western elevators before going east. Grain passes from the cracker and grinding mills through reels that remove all bran and chaff, and a specialty is made of fresh ground rye and bolted meal for table use.

#### MISSOURI WEIGHING CASE.

The proceeding brought by the Merchants' Exchange to test the constitutionality of the new grain weighing law of Missouri was argued and submitted to the state Supreme Court sitting en banc on April 30, but a decision may not be rendered for several weeks. The law gives the Railroad and Warehouse Commission power to weigh all grain in the private and public clevators of the state. The bill was passed at the urganee of the Railway Commissioners, but the exchanges of St. Louis, Kansas City and St. Joseph, as well as individuals interested in the grain business, protested against the law, and finally, after its passage, tied it up in the litigation, which has now reached its final stage.

A bulletin on rats and their destruction is about to be issued by the Agricultural Department. The paper will report the results of tests made in inoculating rats with diseases which, while fatal to the rodents and communicable to each other,

## COMMUNICATED

[We invite correspondence from everyone in any way interested in the grain trade on all topics connected therewith. We wish to see a general exchange of opinion on all subjects which pertain to the interest of the trade at large, or any branch of it.]

#### NEW ELEVATOR.

Editor American Elevator and Grain Trade:—The Fredericktown Milling Company is building a 40,000-bushel elevator, which is to be constructed of wood and cement. The building is 36 by 64 feet and 56 feet high. It will be equipped with two receiving separators and a corn sheller, with elevators to move 1,000 bushels of grain per hour. A wareroom underneath will have a capacity of 10 cars of flour.

Truly yours, Fredericktown, Mo. T. BURTON DUNN.

#### NEW ELEVATORS IN CONSTRUCTION.

Editor American Elevator and Grain Trade:—I have sold out my interest in the grain business at Vernon, Texas, to the Texas-Oklahoma Grain Co., who will continue the business and remodel their elevator at Vernon, also erect a new house at Davidson, Oklahoma, at which point they have a warehouse and corn elevator.

They are in the market for the following elevator equipment: Cleaning machinery, belting, boots, cups, automatic scale, 18x22 wagon scale of 8 tons' capacity, one wagon dump, shafting, spiral steel conveyor, etc., and would be glad to hear from parties having new or second-hand supplies such as above for sale.

Yours very truly, Vernon, Texas.

H. K. GREEVER.

#### AN EASTERN CONTRACT.

Editor American Elevator and Grain Trade:— The Pennsylvania Railroad Co. has let the contract for the construction of a large floating grain elevator to be built for use in the Philadelphia harbor. The hull of the elevator will be of steel and the craft will be equipped with the most modern machinery.

The above clipping, taken from the last issue of the "American Elevator and Grain Trade," simply confirms our theory that a silent testimonial always adds a golden luster to the merit of a manufacturer's output. We are pleased to advise you that we have the contract for the complete machinery equipment for the floating elevator now under the course of construction for the Pennsylvania Railroad Co. After careful investigation of all manufactures of grain handling machinery by the engineers of the company, the Webster Mfg. Co.'s product was finally decided upon.

Yours truly, Chicago. G. H. STEPHENS, Vice-President.

#### NATIONAL HAY ASSOCIATION.

Editor American Elevator and Grain Trade:—At a recent meeting, held in Toledo, Ohio, by the board of directors of this Association, I was instructed to engage counsel and proceed with the hay rate case against the various railroads. In order to do this and do it right, it will be necessary to raise a sufficient fund to properly carry out these instructions, and it was requested that a voluntary contribution be asked for from each member.

I deem it proper at this time to say that every effort possible has been made to settle this case without a hearing before the Interstate Commerce Commission. Such efforts, however, proved unsuccessful, to the extent that the concessions possibly obtainable were not, in the judgment of the majority of the directors, of sufficient importance to warrant them in dropping the case. It is intended by the officers and the transportation committee to push as vigorously as possible our contention for the reclassification of hay and straw, and we need financial support to that end.

The membership of the Association is, even under the adverse conditions, gradually increasing, and if we will all make an effort the desired 1,000 on the roll will be an accomplished fact by July 28. I desire also at this time to say that it is the intention of all concerned having in charge the coming convention to make it a profitable and memorable occasion to all; and with this in view 1 will appreciate correspondence from anyone with suggestions that will help to carry out our ideas, I want every member to do his part if he so desires to.

Yours truly, CHAINEW York City,

CHARLES J. AUSTIN,
President.

#### CROPS IN THE NORTHWEST.

Editor American Elerator and Grain Trade:—With the exception of flax, seeding of small grain is about completed. Wheat has been showing above the ground in most fields for a week or ten days and in some localities the cold has been sufficient to freeze the young leaves.

Nearly all the seed went into the ground before our recent rains, and as soil conditions are about perfect, we believe that we are getting an unusually favorable start, and in a race a good start is a winner, barring accidents.

The farmers are still plowing for flax and corn. Flax sowing is now in progress and corn planting is just commencing.

As compared with last year, the acreage of the different crops for Minnesota and the two Dakotas, as near as we are able to estimate with the information so far gathered, is as follows:

Bread wheat, 5 to 10 per cent increase; durum wheat, a material decrease; oats, 15 per cent increase; barley, 10 per cent increase; flax, 20 per cent decrease; corn, 10 per cent increase.

Yours truly,

The Van Dusen-Harrington Co. Minneapolis, Minn., May 7.

#### TEXAS GRAIN DEALERS' ASSOCIATION.

Editor American Elevator and Grain; Trade:—The sub-committee of the executive committee of the Texas Grain Dealers' Association met at the secretary's office at Fort Worth on April 16 and named May 21 and 22 as the date for the annual meeting and Fort Worth as the place. Among the subjects selected on which to have papers prepared and then discussed by the entire membership present are the following, all very live and important topics:

"What action should the Texas Grain Dealers' Association take to overcome the excessive charges made by withdrawing sale of coupons by telephone companies, under the guise of fear of the anti-pass law?"

"How can our national banking and state laws be amended to provide more protection to shippers in handling drafts with bills of lading attached?"

"What can our Association do to secure the necessary appropriation by our state legislature to protect the small grain interest of Texas against the disastrous ravages of the green bug?"

"Federal inspection as proposed by the McCumber Bill, pending before Congress—what would be the advantages or disadvantages to the grain interest of the country?"

"Origination weights versus destination weights."
"Our Trade Rules—should they be revised or changed; if so, in what particulars?"

Papers are to be prepared on these topics by able men and they will be read and be open for general discussion. As you will observe, they are real live subjects now demanding the attention of grain men, and it is hoped and expected that each member will study them carefully and come to the annual meeting prepared to enter into the discussion on these and any other subjects that may be presented. It is understood that any subject may be presented by a member, whether it is on the program or not, as the annual meeting is for the benefit of our Associa-

tion and its members and friends, and to make it as interesting as possible, all should submit all propositions they think of interest.

Yours very truly, H. B. DORSEY, Secy. Fort Worth, Texas,

#### NEBRASKA CROP REPORT.

Editor American Elevator and Grain Trade:— There has been a marked deficiency in moisture the past month, the precipitation being only about one-half of normal.

May, however, is starting out very auspiciously, with copious showers over the entire state (from one-half inch to one inch), and indications at the present writing point to a good, heavy, general rain—something we have not been blessed with for over a year. There is practically no reserve moisture in the soil, and the present rain ought to give us sufficient reserve for some time and carry the wheat plant well along into the maturing stage.

In some localities in the western part of the state wheat has already been damaged from 10 to 25 per cent, but the bulk of the wheat area is in good condition and indications point to an early harvest and to a yield probably not quite as large as last year.

The wheat movement has been fair the past month, with the Northwest taking the bulk of the offering at stiff bids from one to two cents over Southwest markets. The Northwest will also probably be strong bidders for the first run of new wheat from this state. With a continuation of favorable crop conditions and high prices, farm reserves will be cleaned up closer than they have been for years. This will offset the gradually decreasing visible supply.

The corn movement has been light. Local and Western feeders have been buying sparingly on account of the high prices. A small run of corn can be looked for after corn planting is over. The bulk of cribbed corn dealers have on hand will not come out until another crop is assured. The present condition of the oat crop is favorable.

With prices at 5 cents in the country, there has been a fair run of hogs.

Yours truly, W. E. HOTCHKISS. Hastings, Neb.

#### AMERICANS IN CANADA.

A correspondent of the Commercial West at Winnipeg has revised to date the list of Americans engaged in the grain business on a large scale in the Canadian West, among whom we find the following:

The Canadian Elevator Company, Ltd., of which Gco. E. Piper, formerly of Minneapolis, and Walter D. Douglas, from the same city, are large stockholders. This company is capitalized for \$1,000,000, has elevators and lumber yards in thirty-eight different towns in Manitoba and Saskatchewan. W. H. McWilliams, another American, is vicepresident and general manager of the Canadian Elevator Company.

The Winnipeg Elevator Company was formerly controlled by Canadian capital, but has been absorbed by Clarence V. Piper, son of Geo. É. Piper, who is vice-president of the company, and has a string of eighty elevators and a capital of \$750,000.

The Saskatchewan Elevator Company with an authorized capital of \$1,000,000, and more than \$300,000 invested in elevators that extend into the heart of the great grain producing country of western Canada.

The Imperial Elevator Company, with William J. Bettingen of Duluth, president and principal owner. The capital of this corporation is \$500,000.

the majority of the directors, of sufficient importance to warrant them in dropping the case. It is intended by the officers and the transportation committee to push as vigorously as possible our contention for the reclassification of hay and straw, and we need financial support to that end.

come to the annual meeting prepared to enter into the discussion on these and any other subjects that may be presented. It is understood that any subject may be presented by a member, whether it is on the program or not, as the annual meeting is for the benefit of our Association Company is another American concern. John C. Gage of Minneapolis organized the company in 1903. It has an authorized capital of \$500,000 of which \$300,000 is paid up, and its principal officers are: J. D. McMillan, president; T. H.

Hatchard, secretary-manager, and R. C. Osborne, treasurer.

The British-American Elevator Company is also a firm that partakes very largely of American capital, a considerable part of its \$500,000 capital being made up of money that came from the States.

Smaller operators who yet have places of much importance in the Winnipeg grain market are: The North Star Grain Company, which is capitalized at \$128,000. W. A. Anderson, a gentleman who formerly lived in the United States, being president; McLaughlin and Ellis, operators from Minneapolis; the Zenith Grain Company, with head offices at Duluth and branches that cover a wide field in the grain trading business, and \$50,000 invested in Winnipeg; the Smith Grain Company is another firm of American extraction; and there are many others, less conspicuous, who are yet very much in the game and making rapid progress toward higher places on the roll of important

Among the firms doing business through Winnipeg connections is the Port Arthur Elevator Company, an aggregation of United States capital operating under a Canadian charter and capitalized for no less than \$1,000,000. This firm has main offices at Winnipeg and deals heavily in grain that passes through that city on its way east.

#### ERIE CANAL.

Although the fleet of grain-carrying canal boats got away east from Buffalo later than usual this year, prospects are good for a fair season in this trade. Loads were ready for 52 boats, and 45 started from Buffalo when the season formally opened at noon on May 5. The boats were loading faster there than at New York. Nearly 100 boats had left the Coenties Slip, some of them partly laden with sngar, coal and general merchandise, and many of them empty. Between 200 and 300 others were laid up at New York awaiting the opening, and many more, which spent the winter at ports along the line, were ready to start for Buffalo.

Gangs of men have been at work repairing the aqueducts at Durhamville and Syracuse, and the breaks have been put in readiness for the opening of business. The work at Durhamville was not quite completed, but there was no obstruction to navigation. At other places along the canal work has been carried on this spring, and it is anticipated that there will not be any serious breaks this season such as the ones which hampered the boatmen last summer.

President T. J. O'Brien of the Marine Forwarding Company states that he expects a quiet season in the grain traffic after the early rush is over, although it may brighten later. The rate on wheat is 5 cents to New York, as it was last season, and the boats which left Buffalo on May 5 were loaded for tide water. Morc grain was affoat last year at the opening, duc to an early start, but many charters this year were not shipped on the opening day. The bulk of the Canadian wheat is going to Boston by the railroads as fast as it arrives.

The schedule of rates to New York has been fixed as follows: Wheat, 5 cents; flaxseed, 5% cents; corn, 4% cents; barley, 4 cents; rye, 4% cents; oats, 31/4 cents.

The board of control of Washington has fixed the year's price for penitontiary grain sacks at 6.9 cents, as against 9 cents last season. Oat sacks are reduced to 8 cents from 10 cents of last year. Based on estimates submitted of last year's crops. the board has apportioned sacks to grain-growing counties in numbers as follows: Garfield, 81,000; Columbia, 90,300; Walla Walla, 170,400; Whitman, 380,250; Spokane, 78,000; Lincoln, 188,100; Adams, 187,500; Douglas, 162,000; Franklin, 120,000; Benton, 36,000; Klickitat, 33,750; Yakima, 24,000.

#### CALDWELL IMPROVED AUTO-MATIC POWER GRAIN SHOVEL.

The cut shown herewith illustrates an improved design of automatic power grain shovel manufactured by H. W. Caldwell & Son Co., Chlcago, Ill. Such changes have been made in the details of construction of the mechanism as have been found from experience with the old pattern shovels to be desirable. A few of the strong points of this type of shovel are:

The winding drum is made large enough to accommodate sufficient rope to unload the large size freight cars that are now in general use.

All parts of the mechanism that are subject to shock or unusual wear arc made of steel.

The frame is made of box section, thus securing greater strength and rigidity.

The method of operation is extremely simple. The rope shown in the cut hanging from the large spool is the one to which the shovel is attached and can be of sufficient length so that by means of sheaves it can extend to the car a considerable distance from the machine. This per-

period in 1907, and reached second place among the ports of the United States in the matter of foreign exports. Portland, in the meantime, increased exports from 5,629,217 to 11,400,931, but San Francisco's practical climination from the foreign shipment of wheat is shown by the fact that clearances for nine months were only 716,163, against 413,324 last year.

[For the "American Eievator and Grain Trade."]

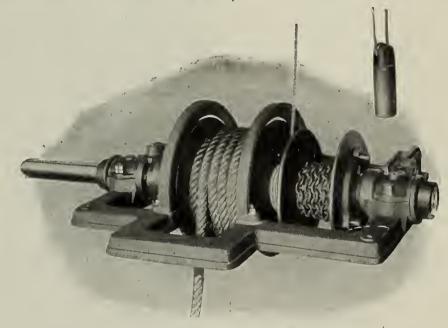
#### REASONS FOR NATIONAL IN-SPECTION.

BY L. C. BREED.

There has been, since the unification of national interests and the growth of a national spirit incident to the reunion of the North and the South after the Civil War, a marked tendency towards the enactment of national laws, and without doubt this policy will be continued.

Applying this idea to the grain business, the agitation in behalf of national inspection is to be commended. Among the advantages of this plan may be mentioned the following:

1. It will tend to render it more difficult to



CALDWELL IMPROVED AUTOMATIC POWER GRAIN SHOVEL.

mits the machine to be located where it will be | "corner" the market through arbitrary rulings by most convenent to the driving shaft, or it can be placed upon a line shaft direct. The shovel rope is wound upon the large spool. With the clutch at the left of the large spool disengaged, the shovel is pulled back into the car as far as

When the workman stops, the weight shown to the right of and above the large spool pulls the rope wound around the small spool and reverses the large spool and the tootbed wheel (next the right-hand bearing). One of the teeth trips a small catch and this releases the clutch lever at the back. To one end of this lever is connected a weight; on the other end are the prongs which operate the half of the spiral clutch sliding upon a feather in the shaft. When the catch is tripped by the tooth on the wbeel it releases the long lever arm. The lever weight is then free to pull on the lever arm, and the sliding half of the clutch is moved toward the spool and engages.

The shaft revolving and acting through the jaw clutch pulls the shovel rope, and at the same time time winds up the chain connected with the book on long lever arm, until the shovel reaches tbe car door and delivers the grain. The chain then being entirely wound up, pulls on the long lever arm, disengages the clutch, allows the catch to fall into place, and the shovel can be again pulled back and the operation repeated.

Where it is desired to operate two shovels at once, a double shovel is furnished, which consists of one right-band and one left-hand macbine.

Puget Sound wheat shipments for the first nine months of the fiscal year, 1908, aggregated 13,053,-029 busbels, compared with 5,019,442 for the same

local inspectors more or less subject to local influences, which affect the grading of receipts at such times of manipulation.

- 2. It will tend to promote confidence on the part of foreign buyers.
- 3. It will tend to enlarge the available space in the various elevators, since it is likely that the Government inspection would be based on three grades, viz.: Sample grain, merchantable grain and unmerchantable grain.
- 4. Through civil service rules, only competent and reliable inspectors would be employed.
- 5. Banks would feel more confidence in the grading and would loan money on grain on a smaller margin below market price.
- 6. Shippers would feel more confidence in the
- 7. Outside buyers would feel more confidence in the inspection.
- 8. It would tend to prevent the mixing of wheat In elevators.
- 9. It would facilitate the adjustment with insurance companies in case of fire.
- 10. It would facilitate the adjustment of railroad claims.
- 11. It would render it more difficult for an elevator proprietor to issue fraudulent warehouse receipts, meaning, i. e., an over-issue.

We sometimes doubt if the Western grain trade appreciates the remarkable object lesson furnished of late by barley. Last autumn the demand was fierce, the excitement great, and the price high. Now, after a decline of 30 cents per bushel, there is "none so poor as to do it reverence."-Pope & Eckhardt Co.

#### BUCKET SHOPS AND SHOPPING.

In an action brought by the Government against Herbert F. Robinson, J. L. Layne and F. E. Holliday, after a tedious trial, a verdict of guilty was rendered on April 16 at Minneapolis.

The men found guilty operated what was represented to be a grain brokerage business in Minneapolis in 1905. It is believed by the United States attorney that they secured between \$75,000 and \$100,000 by representing through circular letters sent out broadcast that they had inside information on the grain market and would make big returns on money invested with them. Edward A. Vaughan was used as a scapegoat, it appearing from the evidence that his name and letters of recommendation had been used by the three defendants found guilty. One other man, John Hogan, forfeited his bail and did not appear here for trial. The law prescribes a penalty of two years' imprisonment and \$10,000 fine.

Cincinnati has taken up the fight on bucketshops after many days, and on May 2 thirty-four "brokers" were indicted by the grand jury and arrested. The names of these men are: W. C. Dudley, John Gorman, L. W. Foster, C. E. Bultman, J. W. Ballmann, J. V. Mackey, C. Frank, W. H. Brown, W. E. Brown, A. McD. Brown, S. Hill, J. Brennan, J. J. Ryan, J. Brill, H. De Camp, G. H. Stapeley, J. A. Payne, G. T. Bennett, E. R. Bryson, H. Furst, H. Warren, J. W. Chuck, R. C. Losey, W. R. Todd, R. Field, B. H. Morehead, W. D. Klausman, T. N. Rutter, H. M. Foster, H. L. Applegate, W. Forster, A. Hauser, T. M. Marsch, M. B. Everham.

The firm of Morehead & Co., of which B. H. Morchead is the presiding genius, is one of the biggest concerns of this kind in the country. It is said to have 170 branches and to do a business of \$2,000,000 annually; while Stapeley & Co. (Geo. H. Stapeley) has 120 branches and has done \$1,500,000 annually.

The Ohio statutes against bucket-shops provide for a penalty of from \$200 to \$500 for the first offense, while a second offense involves six months' imprisonment for an individual and the forfeiture of a charter for a corporation. In spite of the law, however, bucket-shops have been conducted almost openly in Cincinnati for years, the firms passing themselves off as legitimate brokers.

On April 23, the legislature completed the passage of an anti-bucket-shop law, making that kind of gambling felony in New York.

#### BUSINESS AT GODERICH.

The President of the Goderich Board of Trade, in his annual review of trade there, said recently: "For the season of 1907 the amount of traffic received by water at this port has greatly exceeded that of any preceding year. With the complction of the fireproof grain elevator, the distinctive advantage of this port as a distributing center for grain to local millers has shown an unprecedented gain. Forty-two steam vessels in all delivered 2,288,260 bushels of wheat, 661,615 bushels of oats, 321,843 bushels of flaxseed and 69,857 bushels of barley—a total of 3,341,575 bushels. Had not the usual car shortage prevailed during October and November the receipts might have reached over 5,000,000 bushels, and so great was tbc demand for winter storage space that double the capacity of elevator space could easily have been filled. To the grain receipts of the elevator must be added about 2,000,000 bushels ground by the western Canada flour mills, which was handled into their own clevator."

The Leger Mill Co. of Altus, Okla., sent to the Murphy Grain Co. of Kansas City on April 27 a sample of headed wheat which indicated a fine harvest within thirty days.

An information was had some time ago at Saskatoon by the assistant warehouse commissioner of Canada against W. G. Hitching of Saskatoon to the effect that the defendant had carried on a track

buying business in grain without a license therefor, and without filing bond, and had bought a carload of wheat from a farmer without paying to the latter the full purchase price. Hitching admitted the offense but sought to make some explanatory statement. The magistrate then read the section of the Act which provides for a penalty from \$10 to \$1,000 or imprisonment for not less than a month or not more than one year for transgressions of this nature, and thereupon he imposed a fine of \$50 and costs or one month in jail. In addition the defendant must also make good the \$215 to the offended farmer.

#### MORE EVIDENCE OF BAD JUDG-MENT.

While there is no doubt, says Assistant Weighmaster Schuyler of Chicago, commenting on the photograph from which the accompanying picture was made, that the railroads are to blame, in a



A DEFECTIVE CORNER AND END.

very large measure, for furnishing cars to shippers, to be loaded with bulk grain, in the condition as shown, on the other hand, the shipper uses very poor judgment, to say the least, when he loads such a car without first coopering it by reinforcing and lining the car at the defective points. A grain dealer who loads a car with a defective corner and end, as illustrated, without better and more repairs than shown in the picture, must needs have great faith in the railroads promptly making good all loss during transit. There can hardly be a question that this car was defective to a certain extent at the time of loading; therefore, it should not only have been patched on the outside, but lined with cloth or gunnysacking on the inside before loading; otherwise the shipper should not have loaded the car.

If an entirely disinterested observer of leaks may be permitted to suggest, this car seems to illustrate the disposition of many people to take chances, or, what is worse, to antagonize and defy physical conditions. A railroad ought, no doubt, to furnish perfect equipment. It is a good deal to ask shippers to spend their time and money repairing freight cars and getting them into condition to carry grain; but the real point with the shipper, after all, is this: Is it worth while to balk, when a defective car is set out at the elevator, and in a spirit of angry and stubborn defiance of how and "let her go—what the yell do we care?" the visible condition of things, load the car any-Is it not cheaper and does it not rather conduce

to serenity later on to cooper the car as Mr. Schuyler suggests above?

There is another reason for doing this. When such a car is found by the trainmen leaking in transit, if they be loyal employes, they will stop the leak and save their company loss. But the lost grain is gone and so is the evidence that the car did leak in transit. It is then up to the shipper to prove his loss, and that, he'll find, in such circumstances, is no easy matter. He may, if his office records be perfect, establish a claim, but that will take time and it will necessitate expense; so that it is a fact that experience has shown that the man who spends a little extra time and a little money in preventing leakage is better off at the end of the season than the man who takes the stand that it is up to the railroad to "make good" and the road does pay his claims.

#### SPECULATION SUPPORTS PRICES.

The greatest advantages of grain speculation are reaped by the ones who raise the grain. In this country, when so large a part of the production is sold from the farm, the price it brings is an important matter. The bulk of the sales of wheat made by the farmer are in the months immediately after the harvest. The millers who use it want about an equal quantity for each month in the year. In the months of September, October and November, the offerings are usually some two or three times the amount the users require.

Experience shows annually that the surplus of grain is sold from the farm early after harvest whether prices be high or low. The bill before Congress would practically shut out a large class of speculators who are competitive buyers now in the markets. The millers at home and abroad would then face an avalance of wheat thrown upon the market early in the crop year and no competition for its purchase. It is human nature in buying to buy as cheaply as possible. Low prices would be the natural result, for there is very active competition in the sale of the flour, each trying to increase his business by underselling his competitor and to do so must buy his grain as cheap as possible. The offerings would be double the current demand and low prices the natural result.

The farmer is the first seller of the hundreds of millions of bushels annually sold. The excess above current milling is taken by thousands of speculators in competition with one another. These speculators are then interested in holding the market up to sell on. So it is that the great majority of speculators are always interested on the supporting side, and by the power of numbers and interests are able to maintain higher prices than would otherwise prevail.

Under the operation of the current methods of speculation grain is never out of season, and for that reason there is always a demand, for the purchaser can always be protected on a moment's notice. This cheap and sure protection brings in buyers from all over the country who carry the load until shifted to others, as occasion or inclination may suggest.

Thus it is that the exchange custom of trading benefits the farmer. Common sense teaches this, and it is also most abundantly confirmed by experience. The prosperity of the country rests upon the prosperity of the farmer, making it the interest and duty of all to protect the source of this thrift.—Market Record, Minneapolis.

After a conference between the taxing authorities of Duluth and Superior, it was agreed on April 29 that hereafter Duluth will assess and tax grain in store in the elevators. Superior has been getting at the grain taxation problem for some years past, and now that the Duluth people will take it up there is expected to be no trouble in putting it on the rolls.

[From Farmers' Bulletin 317, U. S. Dept. of Agr.]

#### SHRINKAGE OF CORN IN CRIBS.\*

In connection with the marketing of many farm products shrinkage is always an important consideration. Farm crops generally are subject to shrinkage when put in storage after harvest, but it often amounts to so little that it is entirely disregarded. In ear corn and hay, however, the less of weight during storage may be quite large, and with these crops, therefore, shrinkage is, as a rule taken into account. That ear corn generally sustains important losses in weight during storage is so commonly acknowledged that in many localities the custom prevails of taking 75 pounds of ear corn for a bushel in the fall and only 70 pounds in the spring. Observations on the shrinkage of stored crops have been made by several of the experiment stations, and the results have been noted in a previous bulletin of this

In some of the more recent work along this line by the Illinois Station the purpose was to ascertain whether it would be more profitable to market corn as early as possible after husking or to hold it until winter or spring before selling it. Not only the losses in weight were determined, but the increases in price necessary to compensate for these losses were also calculated.

For the purpose of making these observations on the shrinkage of stored ear corn cribs were constructed at Urbana and Sibley in such a manner that they could be lowered to rest upon the platforms of large wagon scales and weighed. At Sibley a check experiment was made by weighing each wagonload of corn as it was put into a stationary crib constructed of ordinary fencing lumber on blocks and weighing out all the corn when the crib was emptied at the end of the trial. .. the first year the shrinkages of the two cribs at Urbana and Sibley varied between 12.3 and 19.8 per

The data secured from other weighings and aiso the results from some preliminary trials are reported. On December 6, 1901, 20,545 pounds of corn were weighed into a crib at Sibley and weighed out again September 25, 1903, when the weight was found to be 18,690 pounds. The loss in weight amounted to 1,855 pounds, or 9 per cent for the entire period of over 22 months. Another crib close by, receiving the same amount and kind of corn and filled and emptied on the same dates as the other, showed a loss of 1,895 pounds, or 9.2 per cent. In still another test a stationary crib was filled during the week preceding November 11, 1905, with 19,850 pounds of ear corn. November 3, 1906, when the corn was taken out of the crib, it weighed 17.280 pounds, showing a loss of 12.9 per cent for the year. Taking all the trials into consideration, the loss in weight of the corn in the different cribs ranged between 9 and 20.7 per cent for nearly two years'

The data secured also indicate that the shrinkage for the second quarter of the year was not much in excess of that for the first, the difference being an average of only 2.10 per cent. The shrinkage for the third quarter, however, was noticeably greater than that of the second, the average difference being 8.70 per cent, while the shrinkage for the last quarter from June to September averaged only 2.10 per cent. It was found that by far the most noticeable shrinkage of ear corn in the cribs occurred during the months of April and May, after which period the corn sustained only a gradual loss.

The observations made on the loss in weight during the second year of storage point to the fact that practically all moisture comes out of ear corn during the first year of storage. In a trial at Sibley continued through the second year the shrinkage was 19.6 per cent at the beginning of the year and had only increased to 20.5 per cent by the following September. At Urbana the corn also lost 1 per cent in weight during the second year. From these results it is concluded that it seems safe to assume that old corn may be stored in cribs with very slight loss from shrinkage. The weekly weighings showed that the crib weights were influenced by the amount of moisture in the atmosphere.

In determining the increase in price that must take place between cribbing time and the follow-

ing December, March, June and September, it was assumed that the corn might have been marketed at cribbing time for 35 cents per hushel, and the average of the "high" and "low" Chicago cash prices for December and May, as summarized from the Yearbook of this Department for 1905, which shows a difference of 3.8 cents per bushel in favor of May, was also taken as one of the factors in the calculation. Furthermore, it was pointed out

that this average difference in price and the allowance of 5 pounds per bushel for shrinkage would make the actual average rise in price between May and December 6.3 cents per bushel. This computation shows that when the percentage of decrease in the weight of ear corn up to and including September of the first year runs from 12 per cent to nearly 20 per cent, as in the four different trials under consideration, an increase in price for September varying between 4.9 and 8.6 cents per bushel is necessary to cover the loss in weight and to insure the farmer against financial loss in holding his corn. In two of the trials the decrease in weight between December and June was greater than would be covered by the average increase in price of 6.3 cents between December and May, while in the other two trials it was smaller, so that the average increase in price, including the usual 5 pounds decrease in the number of pounds taken from 1 bushel, is considered as possibly covering the average shrink-

At the Kansas Station shrinkage experiments were conducted for three years in three small board cribs holding about 4,000 pounds of ear corn each. The cribs were lined with fine wire netting in order to confine the loss in weight as much as possible to the actual shrinkage of the stored corn. They were filled each fall when the crop was in good condition for storing with Forsythe Favorite and McAuley, white dent varieties, Reid Yellow Dent, Kansas Sunflower and Hildreth, yellow dent varieties, and with mixed corn consisting of a few bushels each of many different varieties.

In 1903 the white corn at husking time contained 24.94 per cent of moisture and the yellow corn 19.73 per cent. The corn lost 2.33 per cent in weight on the average during the first month, with but little decrease in weight during the rest of the winter, but by May 6 the total average loss for all cribs had reached 6.14 per cent. The yellow corn showed a loss of 5.66 per cent in the last month of the trial, but in the other tests the weight of the corn remained about the same through the summer. The final weights showed a shrinkage of 7.92 per cent as an average for eight and one half months for all cribs. The white and yellow dent corn lost on the average 3.79 per cent more in weight than the mixed corn.

In 1904 the corn ripened earlier than in 1903 and the first comparative weights were taken October 26, as compared with December 5 in the previous year. The white corn contained 18.95 per cent of moisture and the yellow corn 21.32 per cent when put into the crib. On January 31 the average loss in weight in all cribs was 5.17 per cent, the yellow corn showing the greatest decrease. Again, there was little loss in weight during the winter but a great shrinkage in weight during the spring and early summer months. The lowest weights for the year, with the exception of yellow corn, were recorded on June 20, the average shrinkage at that date being 11.32 per cent. The unal weights taken October 7 showed an average shrinkage of 12.21 per cent. As in the year before the mixed corn again lost least in weight, the ratio of shrinkage being 6.72 to 14.88 per cent for the yellow and white corn. On July 20 and August 24 an actual gain in the average weight of the cribs was recorded and the mixed corn continued to gain from August 24 to the end of the test.

In 1905 the first comparative weights were taken November 16. By December 23 the cribs had lost only about one-half of 1 per cent of weight on the average and the crib of white corn had aetually gained in weight. On February 6 the average shrinkage was 2.26 per cent and on April 19 3.86 per cent. All cribs gained in weight during May, after which there was a gradual decrease in weight until October 16, when the final weights showed an average shrinkage for the entire test of 5.82 per cent in eleven months. The yellow corn showed a loss of 8.48 per cent in weight, the mixed corn of 6.42 per cent, and the white corn only 2.44 per cent during the whole period.

Five samples of white corn at husking time contained on the average 15.2 per cent of moisture, and a single sample of Reid Yellow Dent, husked a little earlier than the white, contained 18.9 per

It is pointed out that the average results indicate that when corn is put into the crib fairly dry and in good condition the shrinkage during the winter months is not great, being a trifle over 5 per cent as an average for the first six months after the corn was cribbed, and that this loss would not be sufficient usually to equal the difference in weights which are required for a bushel of ear corn as sold in the fall, and as it may be sold in the winter or early spring. It is helieved that the loss on the original weight in the eight or ten months is not so great as the

decrease in the actual value of the corn, when considering that at husking time the price is often more than 10 per cent less than in the spring or early summer. The total shrinkage of weight in a year of the nine cribs of eorn was only 8.62 per cent. Attention is called to the fact, however, that precaution was taken to avoid loss in weight from other causes than shrinkage.

"As to whether the farmer should hold his corn or sell it early in the winter may depend upon several factors, as the price of corn, size of the general crop, condition at husking time, and the accommodation which the farmer may have for saving his crop. If the crop is normal and the price of corn is unusually low at husking time, and the farmer has a good erop, the usual recommendation would be to hold the corn. Judging from these experiments corn may be kept safely without great loss in weight until March or April, and if there is a question as to the success of the new crop it may be advisable to hold old corn even later than the date named. However, in Kansas, and in states farther south, old corn is very apt to become infected with the grain weevil or grain moth and great loss occasioned in this way, provided the corn is held too late in the summer. In the northern states, where these pests do not prevail, corn may be safely held for late summer and early fall sale."

The results of the tests also indicate that the shrinkage in corn is not due entirely to the loss of moisture, but that there is an actual loss of dry matter. Samples of Forsythe Favorite cribbed in 1904 contained on October 25, 1905, 11.87 per cent of moisture in the grain, 12.85 per cent of moisture in the cobs, and 12.05 per cent in the ear corn, and a sample of ear corn taken from the seed-corn room on this date contained 11.42 per cent of moisture.

"The shrinkage in the weight of the white co." in 1904-5, due to loss of moisture, could not have been more than 6.9 per cent, since the new corn contained only 18.95 per cent of moisture when it was put into the crib. However, the white corn actually lost 14.48 per cent in weight in the trial referred to, and it will be observed that in almost every case the shrinkage in the weight of the corn was greater than may be accounted for by the loss of moisture.

Hildreth corn cribbed in the fall of 1906 contained 19.75 per cent of moisture in the ear corn and separate determinations showed that the grain contained 17.72 per cent of moisture, while the cobs contained 29.36 per cent. The sample contained \$2.6 per cent of shelled corn and 17.4 per cent of cob. From these data it appears that the cobs and grain become about equally dry in old "If the minimum moisture in the dry corn reaches 12 per cent this would give a shrinkage of 5.72 per cent in the grain and 17.36 per cent in the cobs, or an average shrinkage of 7.75 pounds for each hundred pounds of ears, and 3.02 pounds of this shrinkage, or 39 per cent of the total shrinkage, would actually occur from the drying out of the cobs."

[A letter from Woodward, Okla., of April 5, to the News of Dallas, Texas, says: "Ben Williams has made a practical demonstration of the shrink age of corn. Farmers often hold their corn for several months for a very slight advance in the price when the shrinkage will more than offset the raise. Mr. Williams selected ten ears on Octoper 18 and found they weighed eleven and threefourths pounds. These he laid carefully away and on March 18 weighed them again and had only nine pounds and one ounce, a shrinkage on the ten ears of more than two and one-half pounds. In other words, corn in Oetober worth 30 cents per bushel would have to bring the farmer 40 cents in March to find him the same amount of money where the sale is by weight, which is usually the case.—Ed. "Am. El. and G. T."]

Export wheat made up the first cargo of grain , eason-ชอบ,บบบ Dusheis to Depot Harbor, consigned from the Ames-Brooks company to the Grand Trunk Railroad.

The grain storage eapacities of the terminal markets of the United States having over 5,000,000 bushels' room are as follows: Chicago, 61,325,000 bushels; Minneapolis, 38,000,000; Duluth-Superior, 34,550,000; Buffalo, 20,550,000; Milwaukee, 14,160,-000; New York, 13,230,000; Kansas City, 10,500,000; St. Louis, 9,500,000; Toledo, 9,000,000; Baltimore, 5,300,000.

The assumption that Arizona cannot grow good corn has been negatived, the Phænix Republican says, by Samuel Rogers in 1907. He had ten acres, which were planted on July 17, and 67 days later was offered \$30 an aere for the privilege of turning heef cattle into it, he being given the privilege of "snapping" the field, that is, taking off the ears of corn, an offer that was refused,

<sup>\*</sup>Compiled from Illinois Sta. Bul. 113; Kansas Sta.



PUBLISHED ON THE FIFTEENTH OF EACH MONTH BY

## MITCHELL BROS. COMPANY

(INCORPORATED.)

#### OFFICE:

# Manhattan Building, 315 Dearborn Street, CHICAGO, ILL.

HARLEY B. MITCHELL.....Editor
A. J. MITCHELL.....Business Manager

Subscription Price, - - - \$1.00 per Year English and Foreign Subscription, - 1.75

#### ADVERTISING.

This paper has a large circulation among the elevator men and grain dealers of the country, and is the best medium in the United States for reaching persons connected with this trade. Advertising rates made known upon application.

#### CORRESPONDENCE.

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

CHICAGO, ILL., MAY 15, 1908.

Official Paper of the illinois Grain Dealers' Association.

#### CONSTRUING TARIFFS.

It seems to be a reversal of all the rules and customs of trade that makes the public responsible for any error made by railroad men in quoting rates of freight. The Commerce Commission apparently has no confidence in either the expertness or the honesty of railway traffic men, thus to unload on the inexpert shipper the burden of finding out for his own part that the agent is neither lying to him nor unintentionally deceiving him. Such, however, is the fact. If the carrier's agent were made responsible for errors, the theory is that it would intentionally commit blunders in order to influence shipments. And yet in every other department of trade the principal is bound by the acts of the agent; and in the natural view the carrier also ought to be so responsible, the shipper not being supposed to be equal to the task of unravelling a complicated tariff schedule.

The character of the burden thus laid on the shipper is hardly understood by others than shippers, we imagine. Looking over the Traffic Bulletin of recent date, which records all schedules filed with the Commission, we find no less than 157 changes in rates on grain, grain products, seeds, hay, straw and broom corn, filed during the week ended May 2, and no less than 151 for the week ended May 9. True, most of them are local changes; but they all magnify the difficulties the shipper has to contend with in trying to conform to this unreasonable rule, made because, as the Commission says (A. J. Poor Grain Co. vs. C., B. & Q. Ry. Co. et al.), "past experience shows that billing clerks and other agents of carriers might easily become experts in the making of errors and mistakes in the quotation of rates to favored shippers, while other shippers, less fortunate in their relations with carriers and whose traffic is less important, would be compelled to pay the higher published rates."

We don't know that we have seen in the hysterical press any more scathing indictment of the carriers than this.

#### THE BILL OF LADING.

If the Commerce Commission has any authority to formulate a bill of lading that the carriers must abide by, that body should in all conscience get busy and let the public have it. It is now several years since the "uniform" bill of lading was forced upon its attention and yet no ruling has been made. By a tentative settlement, now several years old, the carriers agreed not to issue their "uniform" bill, with its 20 per cent premium for "insurance," until the Commission ruled on the bill of lading, nevertheless the carriers now propose to abrogate their common-law liability unless 20 per cent additional to the regular rate is paid by the shipper. It is coming to be believed that the Commission cannot enforce the acceptance of any bill of lading it may propose or which the roads do not care to use. If so, the country ought to know it as soon as possible.

The delay in settling this most vital question is becoming intolerable. Congress should have taken it up long ago, but has done so only in a very perfunctory way in committee, being content, so long as the shippers do not crowd them too hard, to neglect it in order to "play politics." What is needed is general support of the Illinois Manufacturers' Association and the Bankers' National Association in their demand that a uniform bill of lading shall be issued and used by the railroads, that shall provide for the liability of carriers for all shipments handled by them at the lawful rates and no more, and that the use of order bills of uniform character as collateral for loans shall not be restricted. The roads as public carriers must conform their business, however inconvenient that may be, to the needs and exigencies of commerce and trade, and when they refused to do so, or seek to evade their duties, the public has just cause for complaint and ample reason to demand that the law shall require them to conform to such conditions as trade and commerce put upon them. They have no moral right to overturn arbitrarily customs and practices that have become as the warp and woof of business.

#### DRY ROT OF CORN.

Dr. T. J. Burrill, chief in botany at the University of Illinois, and J. T. Barrett, his assistant, have published an important circular on "Dry Rot in Corn," which is reproduced in full on another page, and which is commended to the readers. Not that the grain dealer, himself, can do much in the premises directly, however. The "rot" is a disease, or parasite, of which the cob and stalk are the hosts, and its destruction and future prevention are mat-

ters in the hands of the farmer exclusively. But it is a matter of common knowledge that many of the most important facts in connection with the harvesting, storing and curing of grain are not understood, or at least not appreciated, practically speaking, by farmers; and the matter of dry rot, itself more or less of a mystery until Dr. Burrill took up its study some two or more years ago, will be quickest brought to farmers' attention by the grain buyers, who are more intimately in touch with the consuming market than the growers and who therefore appreciate more keenly why and how the rot affects the marketability of the sound grain with which it is mixed, to the extent of causing all told a loss to the Illinois farmers alone in 1906 and 1907 of \$7,000,000.

#### THE ALLOWANCES AGAIN.

For the fourth time since 1903, the Peavey contract with the U. P. Ry. Co., known as the "allowances contract," has been made the subject of enquiry or argument by the Commerce Commission. The history of the final effort to modify the effect of that contract. if not to abrogate it, appears on another page, and need not be repeated here. It is apparent, however, that although the Hepburn act authorizes the payment of the allowances, the practice is one that is bound to be in the future, as it has been in the past, a fruitful source of complaint; so that one is not surprised at the readiness with which the Commerce Commission listens to a petition to reopen a case which it has hitherto passed upon no less than twice in the same way; that is, with approval of the technical legality of the contract and with emphatic disapproval of the practice of paying the allowances as one containing an undoubted discrimination; that is, an advantage to the contracting elevators, however thinly disguised it may be.

It is to be regretted that the Commission, in its decision of June 25, 1904, did not take the bull by the horns, and, in view of the exceeding narrowness of the margin between the point when the allowance ceases to be a payment for services and that where it becomes a discriminating advantage to the elevatorcontractor, did not annul the contract as opposed to public policy. Contrary to the former opinion of the courts, the elevation has come now to be recognized legally as a part of transportation; therefore the logical conclusion would have been accepted in the form of a decision that the carriers should provide the elevators and operate them as and for the public use and benefit directly and not by proxy. Unfortunately, while elevator men understand the advantage any private contractor may have in performing this "transfer" service for a railroad for the "allowances" when the bulk of the grain handled is its own grain, it has been impossible to make courts, commissions and Congress see exactly how this advantage operates as against shippers who do not have such contracts (and the fact that it is so strenuously defended is proof that the contract is an advantage to the elevator con-

cerned) or markets in which the allowances are not made, or where, as in the case at bar, the allowances are less than in a competing market.

The courts years ago in Illinois forbade the roads engaging in the public warehouse business and so made the precedent-laid the foundations—at a time when conditions were entirely different, for the present anomalous situation at Chicago and elsewhere, where the railway elevators (now, but not then, held legally to be absolutely necessary facilities of transportation) are not railway properties at all so far as the public behoof is concerned. although built or paid for by the railways.

If the Commission in 1904 had abrogated the Peavey contract, and held to the doctrine that elevation is a necessary part of transportation, this great and annoying problem would now have been solved and a new adjustment made; but the practice cannot be and will not be, in all probability, abolished now or until Congress changes the Hepburn act to meet this specific problem. And that may be a long time hence.

#### QUEER WITNESSES.

It is inevitable, of course, that at every congressional hearing a certain amount of time must be devoted to the men who have fads to promote and hobbies to exploit; but just why the Senate committee on agriculture should specially invite the grouchy and the sophisticated men of the trade to appear before it does not quite seem plain to the outsider.

There's the man from Kansas City, Kan., who represented an elevator, indeed, and who has been known to buy grain from regular dealers in Kansas, although not often from the same dealer, who has been posing to some extent a "farmers' friend," but who in reality is but the supposititious "cash" side of a concern which makes only pretense of being other than a bucket-shop. This sort of man, who represented no bona fide business interest whatever, was permitted to libel the Kansas City Board of Trade and the inspection departments of both Missouri and Kansas, calling them almost in so many words liars and swindlers, doing their business with the deliberate intention of swindling the public "going and coming."

Now, of course, the Senate committee are not supposed to know the characters and environment and motives of their witnesses, but surely they ought to inquire into them; while the common knowledge of human nature, which should be part of the equipment of a statesman, might be depended upon to warn the committee to protect a great and honorable function of the commerce of this great nation from wholesale libel by men who have themselves been expelled from reputable public exchanges for cause, or who (referring to another class of witnesses) manifestly do not understand the more indirect conditions which influence and affect the necessary conduct of any great branch of commerce and trade. Hearings in which the time of the committee is consumed by taking that kind of ex parte, can be a general restoration of buying and

disingenuous and absolutely irrelevant testimony bring the whole system of "hearings" into contempt.

#### NEW DEMURRAGE CODE.

The Illinois Manufacturers' Association has made a demand for the promulgation of a new rule relative to demurrage charges, which is none other than the "average agreement" now in force in Ohio, Michigan and New York and in the Pittsburg district, where more tonnage is said to be handled than at any other one terminal in the world. Grain dealers are familiar with this plan, which is simply that when a car is unloaded and returned to the carrier a day in advance of the total free time allowed, the receiver shall receive credit for a day, which credit may be used to offset a day with which he may subsequently be charged when the unloading is delayed beyond free time, settlements to be made monthly. The Association further asks that they shall be relieved from the operation of car demurrage in the event of "interruptions by carriers," "setting ear in place not conveniently accessible," "serious breakdowns of machinery necessary for loading and unloading," "strikes, fires, floods, or for any other cause for which the consignor or consignee is not responsible."

The "average" principle has long been urged by grain shippers as a fair one. It would be pretty sure to stimulate the release of cars and would probably not encourage their use for storage purposes beyond present practice; since the shipper who imperatively needs carstorage would willingly pay for it as he does now, although the "average" rule might reduce his demurrage bills somewhat.

Of course, surface indications point to a direct loss of a large sum to the railroads by such a rule; but arguments based on immediate conditions should not defeat a rule which in normal business conditions would certainly facilitate trade and enlarge railway revenues.

#### NEW RATES COMING.

A general advance in freight rates has been determined upon, effective on July 1 and August I in all parts of the East and Southeast. The advance on July 1 will be on "class" rates and on August 1 on "commodity" rates; and the new schedules, it is said by the experts, will disturb rate adjustment throughout the country and change a rate basis which has existed for the past seventeen years. The effect, therefore, upon the general business of the country cannot fail to be marked. To resist this sweeping advance the Illinois Manufacturers' Association has called a meeting at the Annex, Chicago, on May 15.

The action of the Illinois manufacturers seems proper at this time, for the reason that the advance in rates must inevitably act to delay the restoration of business activity. One cause of the depression is undoubtedly the immoderate prices of all commodities in general consumption; and the most superficial student of such crises realizes that before there

selling prices must settle down to the point which the concrete judgment of the world unites to call the bottom. If, then, the carriers unite to prevent such settlement—to artificially boost prices by increasing their cost instead of letting them take their natural tendency—no progress can be made.

It takes something more than the "Sunny Jim" attitude of the National Prosperity Association of St. Louis, grateful as the latter's influence for the cultivation of an optimistic view of the situation must be to all of us, to create new business. Times are bad; none can deny it. There is, therefore, no reason why the railroads should not take their medicine like the rest of the business world and join the ranks of the "boosters," biding their time for renewed prosperity with the rest.

#### PUBLIC ELEVATORS.

Just why the Illinois Railroad and Warehouse Commission should have revived the old elevator controversy by making the ruling that no more wheat owned by public warehousemen shall be registered if stored by them in special bins in their own houses, is not quite understandable, considering that the Board of Trade and the public elevator men had but recently and after some labor arrived at an understanding with the elevator men as to public elevator service, which the Commissioners would hardly be able to provide should the warehouse owners, because of this ruling, go out of the public elevator business. Of course, the Commission is justified by the construction of the law by the courts and Attorney-General Stead; but the law in Illinois as to public warehouse service is more or less obsolete and wholly inadequate to current requirements. Years ago, in order to estop the railroads from operating as public warehousemen, under entirely different conditions of the trade, the law was construed to make that practice unlawful; but since then "the law" has said that the elevation (unloading of cars into a warehouse or transfer) is a part of the transportation of grain. The law, in this state, however, forbids the railroads from operating elevators to perform this part of their service as carriers, and they have, in fact, no elevators other than those leased to private companies, who might refuse to perform the elevation service "the law" says must be performed by the carrier. So the whole thing is in a muddle, which the Commissioners' new ruling does not seem likely, from present understanding of the situation, to clear up. The fact is, the courts are so tied up with the precedents of their own decisions on the subject, adjusted to a condition of things that has long since passed away, that there seems no legal way out of the dilemma. The Supreme Court refuses to compel the railroads to furnish storage room for grain which must have storage or become worthless; and the Railroad Commission apparently is aiming to annul the Board's arrangement with the public elevator men, which was intended to provide the storage room the market must have or go out of business, or to drive the elevator men into a reciprocal pool, or "trust," which, of course, would be legally and popularly objectionable.

### Editorial Mention.

A Boston-Liverpool liner recently took wheat to England at ½ cent per bushel; being the lowest figure ever quoted at Boston for grain.

Dealers who bet on good early May weather by selling corn for shipment before the 15th to get the premiums, would have done better by coppering.

The season is late and has been slow, but this is not the first; so don't get blue. Worse things happen than a late season—an early fall, let us say.

Good time to make repairs on the premises, prices for materials and supplies being as reasonable now as they are likely to be for some time to come.

The owner of a barn-builder elevator always repents himself when he builds a second time. The curious thing about it is that he waits until he puts out the second order.

No wonder some farmers' elevator companies do not do better. Instead of selecting a competent manager and paying him an honest and competent man's salary, some of them advertise for "bids for the management," as if managers were to be bought and sold like so much cord wood or dimension stone!

National inspection bills are dead for this session, and perhaps for some time to come; but so long as statesmen exist who do not understand the subject except from the votegetting point of view, the trade is likely to see the "old thing" come up regularly for a generation, more or less, like the annual seed distribution and for the same reason.

The British ship Celticburn is now in passage from Portland, Ore., loaded with wheat in bulk to Europe. This is the first cargo ever so carried from our Pacific Coast, the traditions of the service being that the trick is impossible—that in twice crossing the equator the grain will heat or shift or both, disasters to cargo and ship that can be prevented only by shipping the grain in bags. Needless to say, the voyage of the Celticburn is one of no little concern to the wheat growers and the grain trade of the Coast.

The shutting down of the Fort Dodge, Ia., cereal mills, turning 200 people out of work, because the oats obtainable are not fit for milling purposes, gives renewed interest in the "good oats" movement started in that state this spring. Iowa farmers are peculiarly fortunate as growers of oats, if they but appreciated the fact, there being within the limits of the state, and accessible from every part of it, the greater part of the oatmeal milling industry of the country—immense mills anxious to get high grade oats at all seasons, and willing to pay a premium therefor. And yet Iowa farmers in the past have seemed to ignore this great advantage, and to grow oats with as much

haphazard as a boy selects unshucked walnuts, whereas the local market should stimulate them to the production of the very best grades of oats possible.

The millers are discussing the removal of the tariff on Canadian wheat, and some of the organs of the flour trade are publishing opinions of readers on the merits of the proposal. Naturally enough, there is a difference of opinion; and the more of these opinions one reads the more one is reminded of Gen. Hancock's saying in 1880, that "the tariff is a local question."

The spellbound county newspaper of Iowa has nominated E. G. Dunn, the co-operative promoter-spellbinder, as a candidate for Governor of Iowa. But with becoming modesty he "refuses to make any definite statement" for the present. The modesty of some of these disinterested Iowa spellbinders seems to be quite as conspicuous as their ability to getting beaten at the polls.

The Durum Wheat League in North Dakota is attempting to lift itself up by pulling up its "galluses." A much more effective way to raise the price of wheat, as a member suggested at the Devils Lake meeting, would be to educate durum wheat growers to eat durum wheat flour; but they won't, or at least don't, although they complain because other people don't and so make a market for durum flour.

The St. Louis Merchants' Exchange celebrated its exit from debt in a unique manner by giving the first and only purely social function ever officially recognized by the directors. The affair was one to do credit to the management; and was so successful as to suggest the thought that this departure from the old traditions might be repeated with profit to the Exchange on proper occasion in the future

More prosecutions are being made of rebate givers and takers, this time in the South and Southeast. The narrowness of the margins in grain makes it practically impossible for such practices to go on undetected for any great length of time, even when the allowance is given by indirection; because the beneficiary of the rebate sooner or later is sure to forget himself and use his advantage to slug his rivals instead of pocketing the extra profit.

The Omaha Bee, with its partisan and provincial spectacles on, sees in the late conference at Buffalo on the late bill of lading an attempt on the part of Chicago bankers to "force grain shipments direct to Chicago, if the money advanced came from that city, regardless of better markets that might, at the time of delivery, be offered at other cities," and more to the same effect. In spite of this ridiculous floundering around in this slough of misconception of the real facts in the case, which are wholly different in every way from what the astute Bee conceived them to be, even involving the producer, who "as usual, must bear the burden of this new complica-

tion, although in no way responsible for it," the unhappy writer by some miracle of ratiocination arrives at the correct conclusion, to wit, that "the situation emphasizes the need of a uniform bill of lading in which the rights of the shipper, the transportation company and the bank are alike properly safeguarded."

The convention season in the North will begin with the Illinois meeting at Springfield in June. As will be noted elsewhere, the program this year will be somewhat varied from the usual routine and in a way to add much interest as well as value to the proceedings. There will be also, in all probability, some entertainment features that will be worth while. At any rate, it is a very long time since a general dealers' meeting has been held at the Capital, and the directory will be greatly disappointed if the attendance does not prove a record-breaker.

One of the big railroads in the Northwest has discontinued the practice of furnishing one valuation of its property for the purpose of taxation and another and a different one (being higher) to the state railroad commissions. The motive behind each estimate must necessarily be different; and the dilemma is presented, in case a question arises, which is the true valuation, the nib of the dilemma being the fact that the courts have held that rates may be made remunerative in all cases; so that the higher the valuation of the roads the higher the legal rates may be made.

The masculine edition of the Young Ladies' Home Journal, familiarly known as the Saturday Evening Post, says with characteristic oracularness, "There is no objection per se to purchases and sales on margin. But the big exchanges ought to discourage shoestring gambling—in no wise different, so far as concerns the individual gambler, from that carried on by the bucket-shops—instead of promoting it as they do." Hand down the recipe; everything of this sort is easy—on paper—but somewhat of a problem in practice—outside a newspaper office or bill in Congress.

The New York bucket-shop bill is pretty sure to drive that nuisance out of the state, as it should check also what apparently is not an uncommon disposition of brokers there to "bucket" orders in their own offices, the offenses being now declared a felony, punishable by fine of \$5,000 for each offense, in case of a corporation, or \$1,000, in case of an individual, or by imprisonment, or both. This offense of bucketing orders is punishable by the Chicago Board of Trade with expulsion; but apparently no such rule exists in the bylaws of New York stock exchanges; for the Commercial expresses its doubt of the law's operating "to materially diminish the bucketing' of orders, even if a special effort is made to enforce it rigidly; and for the very good reason that complainants against individuals or firms guilty of the practice are not the easiest thing in the world to be found." The Commercial should recommend the exchanges

at least to try the Chicago rule. It proved immediately effective here. The "reputable" New York stock broker must be a hardened party indeed if, with such a rule, backed up by this drastic statute, he should "yield to the temptation to bucket orders" on the supposition that, "If Johnny Lamb has always been treated fairly and squarely by Bull, Buoyant and Company, the latter knows wild horses can't drag him into court to give testimony that would send Mr. Margin Ticker Buoyant to jail." But what if he isn't se treated?

A Boston man exhibits the evidences of Hub training in logic. Commenting on National inspection of grain, he says in the Herald: "All grain should be inspected by the Government, and all surplus should be stored by the Government, in storage buildings built by the Government and held at a uniform price, with two or three years' supply on hand of the principle grains, in case of need. History has given us the necessity for so doing." Of course, he assumes the moral and legal right of the Government to invade all kinds of private business. If that right is granted, and such invasion is decided to be desirable at one point, why not go the limit and be logical?

The Ohio law is ample to suppress the bucket-shops of that state if enforced; and the prosecutor in Cincinnati having had the bunch in that city indicted, the whole tribe is "silently stealing away," not only from Cincinnati, but from Toledo and other places where there is a suspicion the lightning may strike at any time. This crowd has grown enormously rich by this kind of plundering of the Rubes; but even the most impudent and wealthy of the lot faint away like the weakest, when the prosecutor is in earnest. Wonder when the "reform administration" in Kansas, that boasts so much of the feat of shutting up saloons and drinking places in Wyandotte County, will do the same trick for the bucket-shoppers also?

The amendments recently made to the German bourse law, which seems to have attracted the favorable notice of certain of our American moral reformers who would suppress "gambling" without injuring legitimate transactions for future delivery, do not seem to meet with equally favorable consideration abroad. writer to the Corn Trade News says: appears that only few people grasp the utterly injurious side (in both senses of the word) of the new law, which will only be known when swindlers, as I call all dishonest men in the trade, will avail themselves of the protection granted to them by this law." The trade indeed goes on as it did before, under serious handicaps, but as the law provides a fine of about \$2,500 (and prison for second offense) for dealing in "futures," and makes all obligations resulting from such transaction uncollectable, the trade is very narrow and unsatisfactory. The law, indeed, is a grossly unfair one, having been drawn by the bankers, who got through an amendment permitting trading in shares and for making future trades in sugar, coffee, cotton, nitrates,

etc., in which articles enormous quantities of "futures" are handled, but took good care to lift none of the burden imposed on the grain merchants. That is the fair play ruling in the German chambers of commerce!

The meeting of dealers at Piqua, Ohio, may not have accomplished much, so far as surface indications go; but at any rate it brought the dealers together for the patient discussion of a business matter of much mutual concern. All this probably has set some men to thinking along different lines than they had been accustomed to; and if nothing more was done than to show dealers, in a practical way, the enormous difficulty, on account of competing interests, of the "rate question," and the virtue of patience in its management, the Pique meeting will have been well worth while.

A Nebraska farmer's elevator man—perhaps of the class who get their jobs by underbidding better men—has a pain again. Having encountered competition from a neighbor that he could not meet, he rushed to the attorneygeneral with his wail of woe that the dead "trust" is after him, like the bogey man, and every fool newspaper in the state goes into hysterics over it. Now, it may not be very neighborly for a competitor to overbid several cents for grain; but just how that fact demonstrates a trust exists is not so clear, more especially since yellow newspaper men of Nebraska and so distinguished an authority as Farmer Vincent of Omaha assure us there is "no longer a grain trust" in Nebraska. The Beaver Valley man should "come out of it."

One of the best replies to the statesman who feels he must suppress "gambling" in grain is the recent experience of the wheat grower of Argentina, of which the Daily Trade Bulletin recently said:

On March 16 the Buenos Ayres Grain Exchange adopted the system of selling grain for "future de-On April 2 the Chicago Board of Trade received its first wheat quotations from that market:-74%c for May and 75%e for July, a differ-These prices widened until May enee of %c. ruled at 73%c and July at 76%e, a difference of On April 22, May was suddenly advanced 2c, while July was advanced 4e. Somebody was "short;" the financial needs of the farmers had been relieved, and they could hold the remaining grain and sell it for future delivery to better advantage. In the meantime, the supplies afloat had been reduced about 4,790,000 bushels, while year they were increased 3,232,000 bushels. At the same time the Argentine visible supply of in the past seven weeks, has been redueed 2,176,000 bushels, while for the same period last year the reduction was only 66,000 bushelsindicating that the farmer, with a supply of 5,500,000 bushels more for sale than last year, is now in control of the situation, as he is not eompelled to accept such figures as may be offered him in the face of an opportunity to sell his wheat for future delivery and to forward it to market at his leisure. The system of "trading in futures" in so short a time has benefited the farmers of Argentina from \$1,000,000 to \$1,500,000.

Now multiply the benefits shown by many times, to bring the proportion up to the scale of North American crops of wheat, corn, oats, etc., and some idea may be had of the benefit "speculation" is to the American grain and pork producers. Our statesmen, as well as our newspaper dogmatists, should study the phenomena of commerce, and not accept un-

questioned the conclusions of politicians, most of whose principles are but the flotsam and jetsam cast on the tide by very commonplace and ignorant theorists.

Snow, the crop expert, has contributed a guess to Orange Judd Farmer, that the season of 1908 will prove a lean corn year. It doesn't exactly look like it at the present moment; but Mr. Snow reverts to the folklore, or common proverbs, of the farmer in support of his guess, on the supposition that those interesting relics of a former day are in fact matters of concrete "traditional opinion that are apt to have some foundation in fact"—like the groundhog legend, for instance, or the rain theory of St. Swithin's Day? One must confess that the subject attracts one; for although the past was not necessarily the happiest period of the race's history, it is full of interest and, perhaps, for that very reason was unscientific. There were no Weather Bureau records to upset either current speculation or generalizations from insufficient local data. However, by reverting to the commonly accepted "law" of weather cycles, Mr. Snow finds that, beginning in 1874, when the corn crop was severely injured by iocal droughts and insects and the yield was 82,000,000 bu. less than the previous year, every seven years there has been a partial failure of the crop from one cause or another. The years 1874, 1881, 1887, 1894 and 1901 were seasons of small corn crops. This year is the seventh since 1901, and the question is, will the law (or rule, or coincidence—which?) hold good in 1908? It certainly is curious how the average yield of the fat years is regularly cut down every seventh year, as shown in the following table of average yield per acre:

1010 10	10	
1874		
1875 to	'8027.7	
188t		
1882 to	'8624.3	
1887		
1888 to	'93	
1894		
1895 to	'0025.6	
1901		
1902 to	'07	
1908	?	

"The corn crop is perhaps the one most dependent upon the character of the season for a large part of the year, its period of growth extending from early spring until the advent of killing frosts," says Mr. Snow. "An examination of the records taken for nearly forty years, taking up the average yield each year, shows that years of strikingly deficient crops come with remarkable periodicity. Reports of the Weather Bureau for these years of low average yields show an equally striking periodicity in heavy deficiency of moisture.' This study of old records is entertaining, indeed, as Mr. Snow says, whether of practical value or not, and the point lies in the fact that if there is a natural law involved and unfavorable crop years are recurrent with regular periodicity, then 1908 is the year in which a partial crop failure would be due." But if this sort of thing works out, won't Mr. Snow run afoul of the National Prosperity Association, which is after all hoo-doos and bars all business suggestions not labeled as of the "Sunny Jim" type?

# TRADE NOTES

The B. S. Constant Co., Bloomington, Ill., state that they are very busy for this time of the year, but they are able to fill all orders promptly.

The Charter Gas Engine Co., Sterling, Ill., has just isued a new folder showing all the styles of engines which it makes, including stationaries, pumpers, portables, hoisters, etc.

A special eatalogue, No. 25, devoted to crushers, pulverizers and feeders, is being sent out by the C. O. Bartlett & Snow Co. of Cleveland, Ohio. It illustrates the well-known Triumph Improved Crusher for ear corn, Triumph Buhr Stone Mill, Triumph Vertical French Buhr Mill and various other types of crushers and grinders. A line of feeders for different materials is also shown.

Bulletin No. 94, issued by the Avery Scale Co. of North Milwaukee, Wis., treats of Avery Automatic Scales for Mills and Elevators and is a 31-page booklet full of concise information on this subject. Many types of Avery Scales are illustrated and their capacities given, while various installations in mills and elevators are shown. The Bulletin will be sent free of charge to grain dealers who write for it.

L. O. Hickok & Son. Minneapolis, have secured the contract for the erection of a barley handling elevator of 90,000 bushels capacity and six reinforced tanks to hold 140,000 bushels, to be built in Minneapolis for the Merchants' Elevator Co., H. D. McCord, president. The elevator is to be fully equipped for the rapid handling and cleaning of barley and will handle this grain almost exclusively. Electric power will be used.

In the reference to the Williams-Lloyd Machinery Co., 337-339 Dearborn street, Chicago, printed in this column last month, a typographical error made us refer to their "Perfect Grain Drier," when it was intended to speak of their Perfect Grain Tryer. The latter is a device needed by every grain handler and is made in sizes to suit all requirements. They carry the material for making them in stock and can fill all orders promptly.

H. W. Caldwell & Son Co., Chicago, Ill., have issued Supplemental Catalogue No. 29, on elevating, conveying and power transmitting machinery, which contains additional and revised price lists and is intended as a supplement to their General Catalogue No. 28. The Supplement is a book of 68 pages and lists equipment of the class mentioned in endless variety. Every elevator owner who is in need of machinery of this character should send for a copy.

A word of timely advice is given in the April number of Conveying and Transmission, published by the Stephens-Adamson Mfg. Co., Aurora, Ill. It has to do with the making of improvements and suggests that now is the time to make changes and alterations, before plants again become rushed with business and are compelled to work at full capacity. This issue also contains tables of pulley hubs and arms, which are said to be the first of the kind over published. The publication is sent free to interested parties.

Sprout, Waldron & Co. of Muncy, Pa., have issued a new catalogue devoted to feed and meal grinding machinery that is one of the handsomest and most complete they have ever got out. All the advertising literature issued by this company is of a high-class nature, but the book under review is remarkable for its typographical excellence. The catalogue is a complete listing of the company's line of mills for grinding feed and meal and in addition to illustrating and describing the various machines it gives much valuable information on the subject of feeding materials and their treatment by the miller. The book should be in the hands of every man who grinds feed

and the company will send copies free to those who write for them.

The Burrell Engineering & Construction Co. of Chicago report that so far this year they have received fourteen contracts, aggregating \$100,000 in volume. This is much in excess of their business last year at this time, or in any year in their ten years' experience.

Those who attend the Operative Millers' Convention at Minneapolis in June should take advantage of the opportunity to see Sprout, Waldron & Co.'s Monarch Self-Balancing Sieve Machine, which will be running at No. 7 Corn Exchange. They will have one of their new machines set up and running. They will also have on exhibition some of their other machines. This will be the first opportunity that millers have had of inspecting this new sieve machine, which has not yet been advertised.

The article of chief interest in the May number of "Graphite," the publication issued by the Joseph Dixon Crucible Co., Jersey City, N. J., is the first installment of an article by W. H. Wakeman, the well-known steam engineer and author, on "Preventing Corrosion of Steam Machinery." There are many firms who find it necessary to stop all or part of their machines at times and this series is intended to emphasize the precautions that should be taken to insure the prevention of deterioration of their machinery.

Users of Twin City Corliss Engines and those who contemplate installing this type of engine will be interested in a new publication just issued by the Minneapolis Steel & Machinery Co., Minneapolis. It is styled "The Engineer's Twin City Corliss Book," and shows pictures of this engine with all parts, down to the smallest bolt, numbered. A list correspondingly numbered gives the names of the parts, the whole being intended to assist the engineer in ordering repairs or renewals. Directions for ordering parts are also given and the remainder of the book is devoted to information of value to the steam user. The company will send copies to any of our readers who will write for them.

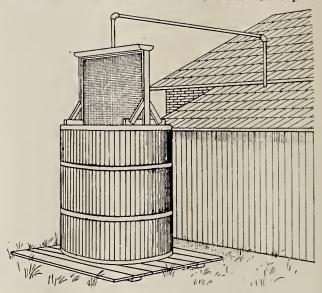
"Westernisms" is the title of a breezy little publication issued by the Union Iron Works, Decatur, Ill., of which the April issue is No. 1 of Vol. 1, promising more in the future. The editor modestly declares that the little paper is the work of a man's two hands and a pair of scissors, out he has such a discriminating sense of what is bright and humorous that he at least shines in a reflected light. The contents of the publication are bright little stories, jokes and the like, with here and there a reference to "Western" Shellers and Cleaners. The purpose is to amuse the reader and at the same time cause him to think about the grain handling machines made by the Union Iron Works. It serves this purpose admirably and it is safe to say that "Westernisms" will have a warm reception from the trade,

A fire which occurred in the plant of the Minneapolis Steel & Machinery Co., Minneapolis, Minn., was confined to the bridge and structural iron department. Although serious damage was done, immediate steps were taken to place the plant in running order again. The fire in no way interfered with the company's engine, foundry and machine or plate shop business and orders for elevator and power transmission machinery will receive prompt attention as in the past. It was announced immediately after the fire that the shops would be running in part within a week and at full capacity, it was hoped, within 30 days. In their announcement the company say: "We trust our customers will not cease to favor us with their orders, all of which will receive the most immediate and prompt attention, and the interruption to our service will be as brief as possible. In repairing our fire loss we will take advantage of the opportunity to make some enlargements and improvements, and will have larger capacity and better facilities in a very few weeks than we have ever had before."

# COOLING WATERFOR LARGE GASOLINE ENGINE.

A method of increasing the cooling capacity of a water tank in connection with a large gasoline engine is shown in the accompanying sketch, from Popular Mechanics.

Galvanized wire netting of about 4-inch mesh is fastened to a frame above the tank. On top of



this frame is a metal trough that receives the hot water coming from the engine through a pipe. The water spills from the trough on the wire netting, which causes it to spread and run down into the tank in a thin sheet. This greatly aids the cooling of the water.

#### COMING MEETINGS.

The National Association of Feed Dealers will meet in first annual meeting at Detroit on June 8 and 9.

The Ohio Grain Dealers' Association will hold its annual meeting at "The Breakers," Cedar Point, O., on July 1 and 2.

The annual convention of the National Hay Association will be held at "The Breakers," Cedar Point, O., on July 28, 29 and 30.

The Texas Grain Dealers' Association meeting will be held at Fort Worth on May 21 and 22, following the meeting in Oklahoma City of the neighboring state association on May 19 and 20.

The annual meeting of the Iowa Grain Dealers' Association will be held at Des Moines on July 14. The Commercial Club has been notified and entertainment of the convention will be provided for.

The fifteen annual convention of the Illinois Grain Dealers' Association will be held at Springfield June 9 and 10, and the general committee having charge has adopted tentatively a strong program, which will undoubtedly be carried out. It will include addresses by Governor Deneen, Ex-Governor Yates and Honorable W. H. Boys, chairman of the Railroad and Warehouse Commission, as well as a number of other features of direct import to the grain shipper. Arrangements are under way by the Chamber of Commerce of Springfield looking to the entertainment of visiting members and their ladies. It is expected to have the largest attendance in the history of the Association.

A business meeting of the Chicago Board of Trade Weighing Department will be held at call room, Board of Trade building, on Friday evening, May 15. The following is the program: "Can We Make Our Weighing Scrvice More Effective?" by Bert N. Law, deputy weighman; "The Value of Neat, Clear and Complete Records," by E. Y. Puckett, deputy weighman; "Some Helpful Remarks," by W. L. Shellabarger, shipper of grain, Decatur, Ill.; "A Few Pointed Don'ts," by George Metcalf, deputy weighman; "Car Inspection Records," by Charles W. Kefer, deputy weighman; "Shortage Claims as Viewed by a Freight Claim Agent," by W. O. Bunger, Chicago, Rock Island & Pacific Railroad; "Scale Talks," by J. A. Schmitz,

scale inspector, Chicago Board of Trade; general discussion

On May 19 and 20 the Millers' and Grain Dealers' Association of Oklahoma state will meet in the Chamber of Commerce rooms of Oklahoma City in annual convention. James Hutchings, Ponca City, is president of the Association, and Frank Grout, Enid, is secretary.

#### CORN AT OMAHA.

John S. Comeford, a representative of the Bureau of Plant Industry, Department of Agriculture, was at Omaha in April making moisture tests of corn arriving in that market. According to local papers the market has been fortunate; for it is reported that while 1906 corn came to market carrying from 17 to 24 per cent of moisture, the crop of 1907, having had an unusual chance to mature, is coming in much dryer, seldom a car being found which shows moisture of over 17 per cent.

The Supreme Court of Ohio has reversed the decision of the trial court, allowing John Wren of Wyandotte County \$1,000 damages for alleged discriminations against him by the T. & O. C.

#### WHEAT RECEIPTS AT PRIMARY MARKETS.

Receipts of wheat at winter and spring grain markets for 44 weeks, since June, with comparisons, in bushels, compiled by the Cincinnati Price Current:

	1907-8	1906-7.
St. Louis.	17,161,000	15,090,000
Toledo	4,414,000	4,787,000
Detroit	1,236.000	1,898,000
Kansas City	29,902,000	38,422,000
Winter wheat	52,713,000	60,197,000
Chicago	22,065,000	29,186,000
Milwaukee	8.140,000	7,726,000
Minneapolls	64.283,000	75,784,000
Duluth	42.643 000	45,388,000
Spring wheat	137,131,000	158,084,000
Aggregate, 44 weeks	189,844,000	218,281,000

Total receipts of winter and spring wheat at primary markets 44 weeks since June, 1907, with comparisons:

	W ILLUCI.	oping.	i otai.
1907-8	52,713,000	137,131,000	189,844,000
19 6-7		158,084,000	218,281,000
19.5-6		155,491.000	215,875,000
1904-5	57.704,000	136,520,000	194,224 00a
1903-4	68,304,000	14 ,939,000	209,243,000

#### VISIBLE SUPPLY OF GRAIN.

The following table shows the visible supply of grain Saturday, May 9, 1908, as compiled by George F. Stone, secretary of the Chicago Board of Trade:

In Store at	Wheat, bu.	Corn, bu.	Oats, bu.	Rye, bu.	Barley, bu.
Baltimore	174,000	327,000		4,000	1,000
Boston	194,000	38,000	18,000		
Buffalo	535,000	13,000	316,000	54,000	396,000
do, alloat					
Chleago	3 787,000	2,998,000	5,422,000	142,000	22,000
do. afloat		158,000	35,000	11,000	2.000
Detroit	145,000	158,000	55,000	11,000	2,000
do. atloat	6,946.000		424,000	33.000	253,000
Duluth	6,816.000		454,000	33,000	~ 75,000
do. afloat Ft. William	2,400,000				
do. afloat	2,400,000				• • • • • • • • • • • • • • • • • • • •
Galveston	125,000	12,000			
do. atloat	120,000				
Indianapolis	154,000	19.000	53,000		
Kansas Cltv	923,006	75,000	38,000		
Milwaukee	267,000	60,000	82,000	7.000	230,000
do. afloat					
Minneapolis	5,138,000	46,000	464,000	25,000	812,000
Montreal	311,000	9 000	145,000		125,000
New Orleans		58,000	110,000		
do. afloat					
New York	490,000	47,000	379,000	16,000	20,000
do. afloat		60,000	723,000	3,000	• • • • • • • • • • • • • • • • • • • •
Peorla	13,000	5,000	60,000	4,000	
Philadelphia	71,000	5,000	00,000	4,000	• • • • • • • • • • • • • • • • • • • •
Port Arthur	3,173,000				• • • • • • • • • • • • • • • • • • • •
do. afloat	521,000	94,000	272,000		42,000
St. Louis	321,000	54,000	2,000		12,000
do. afloat Toledo	190,000	217,000	211,000	5,000	
do. afloat	150,000	211,000	211,000	0,000	
Toronto					
On Canal	105,000				
On Lakes	2,079,000	135.000	464,000		186,000
On Miss. River.					
0 10 10 10 10 10 10 10 10 10 10 10 10 10					
Grand total	28,046,000	4,371,000	9,351,000	304,000	2,089,000
Corresponding			10 011 000	1 001 000	1 040 000
date 1907	50.136,000	7,813,000	10,211,000	1,201,000	1,947,000

#### RECEIPTS AND SHIPMENTS.

Following the receipts and shipments of grain, etc., at leading receiving and sbipping points in the United States for the month of April, 1908:

BALTIMORE—Reported by II. A. Wroth, secretary of the Chamber of Commerce.

Articles.	Receipts.		Shipments.	
Aiticles.	1908.	1907	1908.	1907.
Wheat, bushels	71,706	195,889	76 000	120,000
Corn, bushels	240,195	2,242,268	969,480	2,113,943
Oats, bushels	192,768	418,539	511	1,054
Barley, bushels	1,297			
Malt, lbs				
Rye, bushels	15,463	66 882	13,009	
Timothy Seed, lbs				
Clover Sced, lbs	603	15		
Hay, tons	5.815	9 452	1 921	3,469
Straw, tons				
Flour, bbls		207 999	84,832	156,047
Mill feed, tons				

BOSTON-Reported by Danlel D. Mor-s, secretary of the

Chamber of Commerce.				
Flour, bbls	118 898	184 217	52 867	70,651
Wheat, bushels	15 337	1.058.399	461 903	881 538
Corn, bushels	34 068	1.417,556	123,791	717,012
Oats, bushels	274,535	455,091	1 164	
Rye, bushels	5.827	3.626	18,080	
Barley, bushels	8,003	2,730	16.667	
Flax Sced, bushels	5.338	550	4,080	
Peas, bushels	1,873	3,738	600	600
Mill Feed, tons	1,027	1,292	115	86
Cornmeal, bbls	3,406	3,851	2 495	895
Oatmeal, bbls	12,907	8,195	12.548	2 850
Oatmeal, sacks	15,985	3,026	4,400	3,660
Hav. tons	10,030	9,960	14	337

CHICAGO-Reported by Gco. F. Stone, secretary of the Board of Trade.

526,380		1,914 112	1.247,588
6 46 1,308	7,979.002	4,525,836	8 962 592
7.732,941	9 146 648	5,722,365	7,384 560
1,326 058	1,707,939	670 442	602.053
43,000	211,173	78,538	150 152
1,560,130	2,165 195	1 085 343	1 572,069
244 060	175,800	116 390	400 025
274,393	1.207 615	4 202,487	3 519,829
163,175	114 669	39 968	8.064
1,154 269	1,144,766	689 540	871 746
20 072	23.371	2,007	4.658
763 870	946 484	609 011	677 339
	6 46 1,308 7.732,941 1,326 058 43,000 1,560,130 244 060 274,393 163,175 1,154 269 20 072	6 46 1,308 7,979,002 7,732,941 9 146 648 1,326 058 1,707,939 43,000 211,173 1,569,130 2,165 195 244 060 274,393 1,207 615 163,175 114 669 1,151 269 1,144,766 20 072 23,371	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

CINCINNATI-Reported by C. B. Murray, superintendent of the Chamber of Commerce.

Wheat, bushels	297.716	206.950	328 808	2:6 038
Corn, bushels	661,113	1 093,478	412,390	634 496
Oats, bushels	506.864	864 650	254.677	302,632
Barley, bushels	19 012	70.048	124	3 006
Rye, bushels	70 322	68.060	59,050	19,668
Malt, bushels	145,114	303,200	59 914	200.744
Timothy Seed, bags	1.116	5,740	2,687	2 656
Clover Seed, bags	999	2,176	3,444	4 231
Other Grass Seed, bags	7.642	6 973	8 690	10.629
Hay, tons.	14.470	16,622	11.693	11,855
Flour, bbls	119,558	158,096	76.872	113,838

DETROIT-Reported by F. W. Waring, secretary of the

Board of Trade.				
Wheat, bushels	37,3001	143,565	7501	22 100
Corn, bushels	155.138	511.294	73 221	208 555
Oats, bushels	183,700	313,533	15.284	14 852
Barley, bushels	4 000	18,998	2.018 .	
Rye, bushels	3,800	15.613	9.050	9,264
Flour, bbls	12,800	11,800	7 200	6 200

DULUTIE—Reported by Chas. F. MacDonald, secretary of the Board of Trade.

Wheat, busbels	738,410	5,760,264	1,153,035	3,748,056
Corn, bushels				11.199
Oats, bushels		317,006		330 701
Barley, bushels	63,533	1,021,805	118,048	312,676
Rye, bushels				20 314
Flax Seed, bushels	469 644	1,826,387	229 209	523 771
Flour, bbls	168.590	152,295	26,020	39,070

GALVESTON-Reported by C. McD. Robinson, chief inspector of the Cotton Exchange and Board of Trade.

Wheat, bushels			603,300
Corn, bushels		95,227	359,343
Oats			
Barley, bushels			

KANSAS CITY-Reported by E. D. Bigelow, secretary of the Board of Trade.

Wheat, husbels	1.121 400	2,039.000	1.096 200	2.097,000
Corn, bushels	413.600	1,190,000	731.500	1 108,000
Oats, bushels	595,500	840,000	433,500	738,000
Barley, bushels	15,400	32 000	5,500	19,000
Rye, bushels	6 300	7,000	2,100	2,000
Bran, tons		870	3 420	4,320
Flax Seed, hushels	1,000	800	1.000	800
Hay; tons	12,060	10.540	5.916	8,980
Flour bble	7.0(0	20,000	133,000	129 800

MILLWAILEE-Reported by Wm I Langson

of the Chamber of Comme		W III. J.	Langson,	secretary
Wheat, hushels	490,000	683,000	409,884	510.475
Corn, bushels	110,000	372,000	245 105	666 216
Oats, bushels	798,400	1,161 800	640.756	1,307,349
Barley, bushels	726,000	1,083,400	715 218	477,5 5
Rye, bushels	54,900	99 000	40,000	
Timothy Seed, lbs	224,755	87,240	232,275	462 170
Clover Seed, lbs	293 731	318.545	438 325	493 3 5
Flax Seed, bushels	2.120			1.060
Hay, tons	2 322	1.822	128	172
Flour bbls	171.675	239.600	179 172	262 104

MINNEAPOLIS—Reported by E. S. Hughes, assistant secretary of the Chamber of Commerce.

, , , , , , , , , , , , , , , , , , , ,				
Wheat, bushels	4.237,940	8,809,370	1,491,680	1,881,080
Corn, hushels		386 980	155,450	462 790
Oats, bushels		1,919,540	2,245,010	2,363.270
Barley, bushels		638,080	1,077,170	1,450 150
Rye, bushels	73,670	134.630	51,250	191,620
Flax Seed, bushels	639,740	1,061 270	306,270	474,710
Hay, tons	1,920	2,000	310	40
Flour, bbls	18,304	22,613	1,056,391	1,247 530

MONTREAL-Reported by George Hadrill, secretary of the

Wheat, bushels	140,6211	302,321	2,560	1,000
Corn, bushels	10 617	27,100	7,707	44,000
Oats, bushels	127,129	130,307	14 715	17,100
Barley, bushels	27,902	29,888	1,332	11,000
Rye, bushels				
Flax Seed, bushels	42 000	46,050		
Flour, barrels	28.777	17.840	84. *00	63.440

NEW ORLEANS-Reported by H. S. Herring, secretary of the Board of Trade.

	Recel	pts.	Shipments.		
Articles	1908.	1907.	1908.	1907.	
Wheat, bushels	1 500	300,100	200,000	241,732	
Corn, bushels		632,400			
Oats, bushels		275,000	1,595		
Barley, bushels					
Rough rice					
Clean rice pockets					
Hay, bales		49 500	7 864	4,617	
*Flour, bbls		64 540	33,951	113,156	

Through consignments of flour to Europe not included in re-

NEW YORK -Reported by 11. Helnzer, statistician of

the Frounce Exchange.				
Wheat, bushels	626,000	1.474 0001	727 9 9	1 033 501
Corn, bushels	124,805	3 208 875	269 9 5	2,711.055
Oats, bushels	1,644 000	2 731,500	47.046	150.535
Barley, bushels	56,400	375 600	9,337	39,559
Ryc, bushels	10 725	282 750	100,612	25,995
Timothy Secd, bags			601	1 950
Clover Seed, bags			538	2 279
Other grass seed, bags				
Flax seed, bushels				
Broom corn, pounds				
			Bales	Bales
Hay, tons	28,640	31,300	12,227	25.243
Flour, barrels	412,423	613,406	317,407	313 65

OMANA-Reported by Edward J. McVann, secretary of the

Omana Grain Exenange.				
Wheat, bu	650 400	524,400	641,000	663,000
Corn, ou	815,100	997,700	1.352.000	1.353,000
Oats, bu	652,800	1,070,400	760.500	1,326.000
Barley, bu	41,000	12,000	3,000	22 000
Rye, bu		1,000	6,000	9,000
Flour, bbls				

PEORIA-Reported by John R. Lofgren, secretary of the

Wheat, bushels		68,400	44,000	32,400
Corn, bushels	1,513,600	1.216,800	1,453,200	699,800
Oats, bushels	816,000	2,521,000	841,500	2,556,700
Barley, bushels	142,000	276,000	145,000	99.200
Rye, bushels	21,000	23,400	8.000	9,000
Mill Feed, tons	1,425	3,69u	2,403	3,774
Spirits and Liquors, bbls.				
Syrups and Glucose, bbls.				
Seeds, lbs			30,000	
Broom Corn, lbs				
Hay, tons	2,613	2.310	520	
Flour, bbls	83,650	65 800	86 700	

PHILADELPHIA—Reported by Frank E. Marshall, secretary of the Commercial Exchange.

Wheat, ousnels	95,150	461,239	339,452	
Corn, bushels	156,857	690,478	76 551	
Oats, bushels	355 72 1	649,563		
Barley, bushels	4,000	2,000		
Rye, bushels	1.600	800		
Timothy Seed, bags	2			
Clover Seed, bags	45	400		
Flax Seed, bushels	27 200	124.800		
Hay, tons	8.117	9,354		
Flour, bbls	177 387	355.261	163,223	189,737

ST. LOUIS-Reported by Geo. H. Morgan, secretary of the Merchants' Exchange.

	Wheat, bushels	755,000 3,227			907,305 248
	Corn, bushels	1 852,400	3 037,100	1,834,4 0	3,167.965
	oats, bushels	1.830,400	7.620 3 102 400	1,774.945	
	" sacks Barley, bushels	87,100	204,100	30,980 35,525	
i	" sacks Rye, bushels				
	sacks Hay. tons		8		
	Flour, bbls				

NAN FRANCISCO Reported by Wm. B. Downes, statistician of the Merchants' Exchange.

ı	Wheat, centals	150.160	468
ŀ	Corn, centals	3.683	253
ı	Oats, centals		414
ı	Barley, centals	139.160	15,787
ŀ	Rve. centals	490	
ŀ	Flax Seed, sacks	340	
ı	Hav. tons	12,218	2,115
ı	Flour bhls	69 094	95 249

TOLEDO-Reported by A. Gassoway, secretary of the Prod-

uce Exchange.				
Wheat, bushels	108,000	147,0001	244.100	38,700
Corn, bushcls	380,200	446,000	256,000	
Oats, bushels	198,000	461 800	135,300	
Barley, bushels				
Rye, bushels	9.000	2,700	4.200	5,680
Clover Seed, bags	1.191	3,640	2,931	6 255

#### EXPORTS FROM ATLANTIC PORTS.

The exports of breadstuffs, as compiled by George F. Stone, secretary of the Chicago Board of Trade, from the Atlantic ports during the two weeks ending May 9, 1908, as compared with same weeks last year, have been as follows:

Articles.	For Week Ending May 2. May 4.		For Week Ending May 9. May 11.	
	1908.	1907.	1908.	1907.
Wheat, bushels. Corn, bushels. Oats, bushels. Rye, bushels. Barley, bushels.	53,000	1,560,000 6,000	166,000 2,000 23,000 24,000	1,286,000 1,802,000 17,000 85,000
Flour, bbls	157,000	2 !8,600	126,400	250,700

In ten out of the past fourteen years winter wheat condition has received a severe setback during May. In every case where the May 1 condition has been high the plant has lost many points during the month. In every recent year when the condition has ruled above 90 the deterioration during May has been 7 to 10 points.—E. W. Wagner.

# FIELD SEED SECTION

#### SEED INSPECTION IN MAINE.

The result of seed control in Maine is eonsidered in a bulletin recently issued from the experiment station at Orono.

The first attempt to regulate the sale of agricultural seeds in the state was in 1897, when the legislature enacted a law for this purpose. The law was satisfactory so far as it went, but it did not provide for an inspection and as time passed, it is deelared, the moral effect on some of the trade grew less. 1905 the legislature passed an additional section to the law, calling for an inspection somewhat similar in requirements to that of the law regulating the sale of commercial fertilizers, foods and feeding stuffs.

The law applies to every lot of seeds, containing one pound or more, of cereals, grasses, forage plants, vegetable and garden plants, but does not apply to sweet eorn, trees, shrubs and ornamental plants.

Every lot of seed sold, offered or exposed for sale must be aecompanied with a written or printed guarantee of the percentage of purity. Dealers may base their guarantee upon tests conducted by themselves, their agents or by the director of the Maine Agricultural Experiment Station, provided that such tests shall be made under such conditions as the said director may prescribe.

The station examines as promptly as possible all samples of seeds sent by dealers and others to assist them to decide (1) whether they should or should not purehase the seed, and (2) what guaranty of purity should be placed upon the seeds. While it does not take long to examine a fine seed with high percentages of purity, a poor redtop or similar fine seed may take so much of the time of the analyst as to seriously delay reports upon other and more important seeds. For this reason in February, March and April, when the call for seed analysis is greatest, frequently the examination of fine seeds, such as red-top, cannot be undertaken.

The inspection for 1907 showed that in quite a number of instances seeds were sold under a guarantee much too high. It developed, in most instances, that these seeds were bought from wholesale dealers in Maine and were sold by the retailer under the guarantees printed or steneiled on the bags as received from the wholesale dealer. As the seeds were, so far as it was possible to ascertain, bought and sold by the retailer in good faith, it did not seem right to prosecute him. On turning to the wholesale dealer, who should have been the responsible party, it was not practicable to trace the goods to him. That is, it was not practicable to prove that the sample drawn at the store of the retailer was from a particular lot furnished by a wholesale dealer. While it would have been a simple matter to prosecute the retail dealer, it was not as easy to press the case against the wholesale dealer.

In January, at the invitation of the director of the station, representatives of the wholesale houses he believed to have violated the law met at his office and the whole matter was gone over. As it seemed that by the amicable arrangement then made and the clever understanding of the law on the part of the wholesalers, the future would be safeguarded, all cases for 1907 were dropped.

However, it is announced that the law will be much more strictly enforced in 1908 than in the past. As the law was more particularly intended to apply to grass seeds than to ordinary vegetable seeds, such seed to be lawfully sold must earry "a written or printed guaranty of its purity and freedom from foreign matter." It is not enough that the package carries the figures, but they must be aeeompanied with explanatory words naming the seed and what the figures mean. For example

-a bag of timothy seed labeled "9.5 per eent" is not lawfully branded; it should be labeled in some such a way as the following: Timothy 99.5 per cent pure.

The analyses of samples of grass and other seeds collected by the inspector and analyzed in 1907 show that for the most part the timothy was clean and free from injurious weeds, while this and other grass seeds offered in 1907 showed marked advance as to quality over those of 1906.

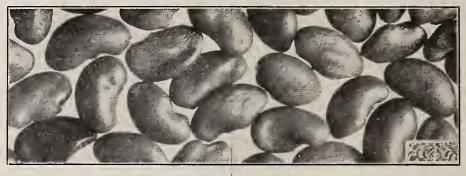
#### THE VITALITY OF SEED OATS.

The Illinois Experiment Station has realized for some weeks that undoubtedly the difficulty of getting good se∈d oats this spring would be serious. | and Mamie L. Crosby, Assistant, Seed Laboratory.

per eent, the seed sown per aere should be accordingly increased. Experiments conducted at the Illinois station have shown that no harm is likely to come from sowing up to four bushels per aere. Just how much more than the usual amount should be sown would have to be determined in each individual ease after a germination test is made.—Albert M. Hume, Illinois Experiment Station.

#### IMPORTED LOW-GRADE CLOVER AND ALFALFA SEED.

In a bulletin recently issued by the Bureau of Plant Industry, United States Department of Agriculture, the subject of imported low-grade elover and alfalfa seed is treated at length by Edgar Brown, Botanist in Charge of Seed Laboratory,



ALFALFA SEED OF GOOD QUALITY. Natural Size and Magnified Nine Times.

The reason for this is not only the small crop of last year, but more especially the unfavorable conditions that prevailed throughout most of the last season and the resulting low vitality of the crop.

I am not able to generalize much from the number of vitality tests that we have made on oats this spring, but the indications are that only the very earliest varieties are likely to be of strong vitality. Now what shall be done? I urge farmers immediately before sowing oats to make a germination test of seed. This can easily be done. Seed oats can be tested in a plate of moist sand after the same manner that tests of seed corn are made. Take a common dinner plate and fill it full of moist white sand. Make the sand moist, but not extremely wet, because if it is very wet the seed will mold and not germinate at all.

Take 100 seeds of the oats to be tested and be

It is pointed out that during the ealendar year 1906 the United States exported 3,615,875 pounds of elover seed, and during the latter half of the same year imported 6,306,561 pounds, the exports for the year being only a little more than onehalf the imports for six months. The same condition holds true with alfalfa seed, the imports far exceeding the exports. The relatively large importation of these seeds results from short erops in this country and a constantly increasing demand on account of the new land being brought under eultivation and the extension of diversified farming.

In Europe seed testing has been gradually growing in favor for forty years and is now reeognized as an important aid to agriculture. All the European countries, with the exception of Spain and Turkey, have seed-testing stations, varying in



FIG. 2. IMPORTED ALFALFA SEED OF LOW GRADE. Natural Size and Magnified Nine Times.

sure that the 100 seeds represent the average of number from one in Italy to twenty-eight in Gerthe lot. After the sand in the plate is moistened, many. Each of these has the necessary equippress the seeds into the sand, large end down, ment for making complete tests of seed, both for and leave them so the upper small point of the mechanical purity and for germination. sced is visible, and so that the seeds can be easily counted. Cover the plate thus prepared with a second plate, in order that the moisture may not evaporate too rapidly from the sand, and at times when the sand becomes rather dry, moisten it with a little water, but use eare to keep it only well moistened and not to get it too wet. Keep the plates in a reasonably warm place, at about room temperature, and the seed will germinate. Four or five days will be sufficient for practical purposes to make the test.

Good seed oats ought to germinate 95 per cent, and if it were possible to get seed from absolutely reliable sources that would germinate such a per cent, it should be obtained. In ease the oats at hand for seed only germinate, say, 80

The test for mechanical purity as conducted in these stations includes not only the determination of the percentage of pure seed and of other seeds and dirt, but also the size and source of the seed. The source of the seed is determined by the eharacteristic weed seeds which are found. While errors are no doubt made, these determinations are of great value in showing that at least a part of the seed was raised in a certain section, and they furnish information as to the probable adaptability of the seed to local conditions. Through the work of these stations the people have eome to appreciate the importance of good seed, and as the greater part of that now used in Europe is sold on the basis of accurate tests for

meehanical purity and germination, the sale of low-grade seed has been greatly reduced.

A similar condition exists in Canada, where there is a strict law governing the quality of seed sold. In this country, however, only three states have any effective legislation restricting the sale of seeds within their borders. At present there are no Federal restrictions on the importation of low-grade and worthless seed. As a natural result the United States has become the dumping ground for the poor seed of Canada and Europe. The character of some of the seed imported is shown by the accompanying illustrations.

Analyses are given of sixty-one lots of low-grade red clover seed imported during the fiscal year ended June 30, 1906, amounting to 990,809 pounds. The total importations of red elover seed for the same period amounted to 7,498,287 pounds, so that the low-grade seed furnished about one-eighth

Horaee E. Conklin, \$290,000; M. N. Rogers, \$3,000; P. J. Quilter, \$3,000; C. P. Woodward, \$2,000; J. C. Hillis, \$2,000. The stockholders are the directors of the company.

#### GROWING ALFALFA SEED IN FRANCE.

Writing from Marseilles, United States Consul-General Robert P. Skinner gives the following information in regard to the growing of alfalfa seed in France, from official agricultural sources:

Alfalfa, commonly called luzerne in France, is grown very generally in this country. Seed for sowing is commonly obtained in the south of France. The type known commercially as luzerne of Provence is obtained in the Departments of the Bouelies du Rhône, Gard, Vaucluse, Drôme and Ardèche. The luzernes of Poitou are obtained in the Departments of Gers, Aude, Tarn, Sarthe, Vienne, Deux Sèvres, and more or less throughout

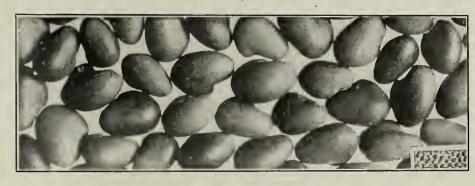


FIG. 3. RED CLOVER OF GOOD QUALITY. Natural Size and Magnified Nine Times.

of the total. These low-grade importations contained seed enough to sow approximately 125,000 aeres at an average rate of seeding. This seed is for the most part small-sized, light-weight screenings. A practical failure must be expected wherever seed of this quality is used, either from not securing a stand on account of poor germination or from smothering with introduced weeds.

In more than one-half of the sixty-one samp'es of which an analysis is given the weight of 1,000 seed is less than a gram, while 1,000 good, plump seeds weigh 11/2 grams or more. These lots contain an average of only 43.1 per cent of live red elover seed and much of the seed that will germinate is worthless for seeding purposes, as it is of small size, immature and of low vigor.

This low-grade seed always earries a large number of weed seeds, fifty kinds being found in each

the old province of Anjou; also in a few departments in the north of France. It is unquestionably true, however, that the seed from Provence is superior to all other, yielding more generously and manifesting more resistance to all unfavorable conditions.

The same fields are utilized for growing the hay and the seed itself. In general, three crops of hay are cut from the same field, and sometimes in Provence a fourth erop, ealled the "regain," is gathered. As a rule, the second erop is allowed to mature, although it sometimes happen: that the third erop also is permitted to produce seed in warm regions, when the temperature is particularly favorable; that is to say, not too damp.

The seed is sown broadcast, and the growing erop requires no particular attention, whether it



FIG. 4. IMPORTED RED CLOVER OF LOW GRADE. Natural Size and Magnified Nine Times.

of two lots. Of that from Germany all but five | be intended to cut the grass before or after lots contained dodder seed.

Analyses are also given of sixteen selected lowgrade samples of imported alfalfa seed, representing cargoes amounting to 575,572 pounds. Since the total importations of alfalfa seed during the same period were 5,688,689 pounds, the low-grade seed furnished about one-twentieth of the total. The quality of this low-grade seed is similar to that of the red clover. The germination is low and the seed in many samples is small or shriveled. All but two of the lots contain dodder, and all contain an average of more than fifteen kinds of weed seeds.

E. W. Conklin & Son of Binghamton, N. Y., have reincorporated their business with an inereased eapitalization of \$300,000 to do a wholesale seed business. The stock is held as follows:

maturity. Alfalfa is never planted in rows for seed-growing purposes.

The value of lands suitable for alfalfa growing ranges from 2,000 to 3,000 francs per hectare (\$156 to \$234 per acre) in this part of France,

The erop is cut either by hand or with an ordinary mower, and the seed is thrashed out by means of special instruments resembling the wheat-thrashing machine. The cheapest type of "deensenteur," or elassing and purifying machines, is offered for sale at \$17.37. It is elaimed for it that it will eliminate stones, dust, all the euseute, and nearly all the plantain seed, at the same time dividing the grain into two classes, one containing only fine large grains and the other all the small grain. More elaborate devices are offered for sale at from \$34.75 to \$96.50.

The wages paid to farm laborers where alfalfa is grown are usually 3 francs (58 cents) per day. The seed is thrashed by contract, the price varying between 8 and 10 franes per 100 kilos (\$1.54 to \$1.93 per 220 pounds) of seed yield.

A wide difference of opinion prevails in regard to the average yield of seed per hectare (2.47 acres). One practical seed man places it at 500 kilos (1,102.3 pounds), while another states that the average is as much as 1,000 kilos (2,204.6 pounds). It is probably somewhere between these two figures. No special difficulties present themselves in this culture which are not met with in farming operations generally. The most persistent enemy of the alfalfa farmer is the "euscute" (genus euseuta), commonly called in English "dodder of thyme." This parasite weed stifles the plant and eauses its death. As a rule the cuseute and other weeds disappear annually after the first eutting, leaving the second, from which the seed is gathered, comparatively free from objectionable matter. Finally, when the euscute does mature with the alfalfa, it is eliminated in the "decuseuteur" referred to. In certain regious prior to the second cutting a caterpillar, denominated the "negril," sometimes makes its appearanee and devours the flowers before the seed has formed. Until now no efficacious means of fighting this pest has been found.

Damp localities are unfavorable to the production of alfalfa seed; when the plant bursts into flower, new shoots sprout at the base of the plant, and the flower itself dries without maturing.

The erop of seed is gathered in August, September and early in October, according to the region, though as a rule in September. After the field is cut the crop is dried, and then follows the thrashing and eleaning operations, which continue two or three months. The price received by the seed grower varies naturally with the year and the crop. In 1907 dealers paid 150 francs per 100 kilos (\$28.95 per 220 pounds) to farmers, this particularly high price being due to the destruction of a large part of the seed erop by inundations. One informant states that threefourths of the Provencal crop of 1907 was thus destroyed. In ordinary years when the crop is abundant farmers receive 110 to 115 francs per 100 kilos (\$21.23 to \$22.20 per 220 pounds). Exportations of the erop of 1907 have been sold to American buyers, who bought early at \$26.62 to \$30.36 per 220 pounds,

The declared value of exportations of alfalfa seed to the United States from the Marseille con sular district in 1907 was \$19,866, against \$2,663 in 1906, and \$19,028 in 1905.

#### AMERICAN GROWN SEEDS.

The large amount of our comparatively common seeds which is annually imported is astonishing. An effort is being made by the Department of Agriculture to induce the growing of more seeds at home, reducing the necessity for sending money abroad and at the same time widening the field for American growers.

It is true there are some seeds which we do not yet know how to grow in the best manner. Not long ago the best beet seeds were grown in Germany; now the United States produces nearly all the seed it requires, and better than the German seed. There has been recently a considerable demand for good seed of rape and hairy vetch seed for forage crop planting. This is highpriced seed and much of it has to be imported. Heretofore it has not geen thought possible to grow good cauliflower seed in the United States and large amounts are imported from Germany; but a few years ago a section was discovered in the state of Washington, where excellent seed of this vegetable can be produced.

It is the belief of the Department of Agriculture that the climate, soil and agricultural conditions generally of the United States are so varied and diversified that experiments in all directions ander seientifie methods will develop the fact that

there is some section somewhere in the country which will be found suitable to the perfection of nearly all, if not all the seeds for which such large sums of money are now sent abroad.—Indiana Farmer.

#### ARTIFICIAL HEAT AND SEED CORN.

It has been found to be very important to dry out seed corn quickly and thoroughly and the use of some artificial heat is in most cases desirable, according to a circular issued by the Cornell University Agricultural Experiment Station.

In favorable dry Autumns artificial heat may not be necessary, but in many cases the kiln drying of seed will be found to be very important. In an experiment made by C. P. Hartley of the United States Department of Agriculture kilndried seed gave an average yield of 16 bushels per acre more than ordinary air-dried seed of the same variety grown in the same place. The experimental field in this case contained about 10 acres and was planted with the air-dried and kiln-dried seed in alternate rows.

#### WARNS BEAN GROWERS.

G. F. Allmendinger, secretary of the Michigan Bean Jobbers' Association, has issued the following warning to farmers against "bear rust:" "The bean crop of the state is worth annually from \$5,000,000 to \$7,000,000. In recent years there has come into existence here a disease commonly known as 'bean rust,' which has played havoc with the crop in New York state. Beans showing rust spots should not be used for seed, as when they are used for seed the probability is that the resulting crop will be affected to a very large extent. This letter is, therefore, written to make the request that the matter be called to the attention of bean raisers in the state, that they may be urged to use extreme care with regard to the seed planted this year.

"It may be said further that the crop of 1907 was one of the poorest in the history of the state. Many beans were soft and not thoroughly ripened. If such stock is used for seed, the result must naturally be an inferior crop. Farmers are, therefore, urged to use the same care with regard to bean seed that they would use in planting corn. It is of the greatest importance that this crop, in which Michigan leads the world, shall not show deterioration through the use of poor seed."

#### THE SOY BEAN.

The Ohio Agricultural Experiment Station has issued a special circular devoted to soy bean, giving information as to the uses, varieties, culture and harvesting of this legume.

The Ohio station began experimenting with soy beans 14 years ago and has grown them continuously since, though much of the time in a small way. For several years past it has been growing, upon the average, about 15 acres.

One of the most common uses of soy beans is for hay. While the crop will never take the place of clover in farm rotation as a producer of hay, it unquestionably has a place of its own to fill. In the case of a failure of clover seeding, new or old, or of any spring crop, there is abundance of time to grow a good crop of soy bean hay.

The Ohio station has had very good results from putting soy beans in the silo in connection with corn, using two parts by weight of corn and one part of soy beans. It has been found that soy beans make better silage when thus mixed with corn than when used alone, as they tend to ferment overmuch and develop objectionable odors. When properly made, soy bean silage is more profitable and is consumed with less waste than in the hay.

Soy beans have thus far been a very profitable crop when grown for seed. Very seldom has the supply equaled the demand. Yields under Ohio conditions vary from 10 to 30 bushels per acre, with an average of about 18 bushels. As they

seldom bring less than \$2 a bushel wholesale, the crop is a remunerative one. For this reason they have not been used as extensively for feeding as they might well be. At \$66 per ton they are rather too dear to feed, even though they carry quite a little more feed value per pound than oil meal.

#### HEARING ON PURE SEED BILL.

A considerable number of seed dealers from different parts of the country appeared before the house committee on interstate commerce April 21 at a public hearing on the Mann pure seed bill. There was a general contention that low grade importations and certain other abuses which had developed in trade were chargeable to the dealers who do not handle seeds as a regular business and that the federal inspection law, applicable to the legitimate and reputable seed business of the country, was not needed.

It was maintained that the recognized class of seedsmen control at no period of their growth the crops of seed which reach them from all parts of the world. The seedmen also have no control of the product after it leaves their hands.

Among others who appeared before the committee were George S. Green, J. C. Vaughan and Charles Dickinson of Chicago.

#### CLOVER SEED IN THE DAKOTAS.

Wonders will never cease. Thus reads the old, old saying, as old as the hills. The Dakotas, or much of them, have been farmed for 20 to 30 years. During that time the farmers have been almost a unit in concluding that clover could not be successfully grown in these states. This idea was so prevalent that until recently but few farmers sowed any clover. Some had tried it long years ago and failed, hence the many that accepted the idea without question. The past two of three years farmers in both the Dakotas have been sowing clover. This is particularly true of the eastern half of both states. A few have grown it for several years. The result has been that in a large majority of instances the attempts to grow it have been successful from the first. It is now being grown more or less in nearly every county in both states. In some instances as much as 200 acres have been grown on a single farm,

One of the surprising things about clover in Dakota is that it produces seed in the first crop as well as in the second. That is true of the variety known as common red. As much as two to three bushels per acre have been produced in the first crop. In the second crop as much as five bushels per acre have been grown. But in these instances one crop of seed did not precede or follow the other. Nor do bumblebees seem to be much in evidence. They are few and far between in the Dakotas, and yet clover seeds freely. The theory of bumblebees doing all the fertilizing is getting a little punctured.

This question has not yet been worked out to the full limit. One farmer, H. A. Button of Casselton, N. D., grew 42 bushels of clover seed in 1907 on eight acres. He cut the clover during the last week in June. The season was late and the clover had scarcely at that time reached the stage of full bloom. He had somewhere about 100 acres more of clover on his farm. This was not cut for some three weeks later. The second growth from this did not make enough seed to justify threshing it. This experience shows the wisdom of cutting the first crop at an early stage of growth when the second cutting is to produce seed.

It is more than probable that the best crops of sced will be obtained from clover that is closely pastured until some time in June, the stock being then taken out. This, however, has not been proved. There are some difficulties in the way. But few farms are fenced in any portion thereof. On but few of them is live stock found in sufficient numbers to graze the crop down

quickly enough. These conditions will change in time.

The future of the crop cannot be forecasted with certainty. It is more than probable, however, that both Dakotas will become as noted for the growth of clover seed as Michigan, Wisconsin and certain parts of Minnesota are at the present time. The outlook is certainly encouraging.

The great interest in the growing of clover in the Dakotas does not lie so much in the seed that it will grow as in the protein food that it will furnish for stock, in the nitrogen that it will bring to the soil and in the humus that it will bring to the same. The nitrogen will feed the grain crops. The humus will bring moisture to them and will keep the soil in a good condition mechanically. Where clover is successfully grown in the Dakotas the great sore of their agriculture will soon be healed.—Professor Thomas Shaw, in Orange Judd Farmer.

#### NATIONAL CORN SHOW.

Indiana corn growers held a meeting at Indianapolis recently to awaken interest in the National Corn Show to be held next fall at Omaha. J. W. Jones, general manager of the Omaha show, addressed the meeting. Addresses were also made by D. B. Clore of Franklin, who won the national championship at the recent Chicago meeting; Joseph Overstreet, another Johnson County grower; L. A. Vogler of Hope, Harvey Gray of Galveston and others.

A committee consisting of T. A. Coleman, chairman, L. B. Clore and Harvey Clay were chosen to wait upon Governor Hanly in the near future and ask him to appoint a special commission representing the state, to have charge of the Indiana exhibit at the show.

#### FIELD SEED NOTES.

The business of the Johnson Seed Co. at Lakeland, Fla., has been purchased by Hagadorn & Parker,

A concern at Hastings, Neb., recently purchased a single load of alfalfa seed for which the grower received \$660.

The seed corn and onion warehouse at Prescott, Wis., is reported to have been destroyed by fire. There was a gasoline engine and some cleaning machinery in the building.

It is announced that farmers and business men in and about Greeley, Colo., believing that the Greeley district will become one of the greatest producing sections in the West, propose to organize a company and establish a large seed house at Greeley. Nothing definite has as yet been done, but it is declared that the venture would undoubtedly be successful.

O. W. Smith, manager of Smith & Co., dealers in produce, seeds, etc., at Boise, Idaho, has been in the East obtaining ideas and plans for a new six-story building which the firm will erect at Boise. He was especially interested in grain elevating machinery, as he probably will install some in the new structure. The building will cost \$50,000 and the equipment \$10,000.

The Wertz Seed Bill which has been before the Agricultural Committee of the House at Columbus for some time will probably never come from that committee. It was a bill similar to that introduced by Senator Barry, and in our opinion would have resulted in the Ohio farmer being obliged to take less for his seeds than the farmer in other states, and would have caused every seller of seed in Ohio to go to the trouble and expense of stating just exactly how much foreign seed there was in any lot he offered for sale. We are glad to see that some of our legislators are aware of the fact that Ohio is (as a rule) the largest clover seed producing state in the Union, and one of the biggest exporters. Of course the crop the past two years has been almost a failure, and it was necessary to import seed into the state. This may never happen again,-J. F. Zahm & Co., [From U. S. Dept. of Agr.—Bureau of Statistics—Builetin 65.]

#### RUSSIA'S WHEAT TRADE.

BY I. M. RABINOW.

Iu Russiau agriculture and grain trade the export trade is of much greater imporance than in the United States. During the decade 1893-1902 the average annual quantity of grain transported ou all Russian railways and waterways-that is, approximately the total quantity of the five principal cereals which entered trade for more distant markets than those of the immediate neighborhood-was equal to 10,512,000 short tons. During the same period the average quantity of these eereals exported was 7,957,000 tons, or almost 76 In 1903, 10,492,000 tons were exported, out of 14,635,000 tous transported, or 72 per eeut, and in 1904 the exports were 10,396,000 tons, or 72 per cent of the 14,414,000 tons transported.

In the American grain trade the exports also play a very important role; but, measured by the same relation, this role is far less important than in Russia.

lt is evident, therefore, that in Russia more than in most other countries the internal commerce in grain is an exceptionally important phase of the export trade, and that the organization of the latter cannot be understood without

a previous study of the former. Peasants Unable to Hold Their Grain.-While modern methods have been, to some extent, introduced into the Russian grain trade, the peasant still follows antiquated customs. Being it great need of ready money immediately after harvest, when the tax collector comes around, he is usually forced to sell his grain as early as possible, regardless of the price. More than half the peasants are illiterate, and even when not so they are seldom readers of newspapers and do not

know the couditions of the market.

The buyer is either a local speculator or the ageut of some firm of grain dealers in a distant eity. The local speculator has an advautage in that often he is the local banker and the creditor of the peasant. Ageuts of the local speculators are often awaiting the arrival of peasants with their loads of grain some distance from the markets and make energetic efforts to direct them to their respective principals. The profits of the local buyer may be judged from the fact that the commission for his service often reaches 10 per eent of the purchase price of the grain.

The primitive character of these commercial transactions is shown by the fact that in many eountries on the Volga the local buyers, iustead of competing with one another, determine by lot by whom each wagonload of grain, as it appears,

shall be bought.

The more fortunate peasants who live conveuient to large markets are able to make personal deliveries of their grain and are slowly learning modern methods and defending their interests. Perhaps nothing can better illustrate the recent beginning of this progress than the following nar-

"On the market place in Nikolaiev (one of the most important southern ports) I had an opportunity to observe a faet which, a short time ago, would have been altogether ineredible. The peasants, on arrival at the market with their grain, were asking: 'What is the price in America, according to the latest telegrain?' And what is still more surprising, they know how to convert cents per bushel into kopecks per pood."

This understanding of market conditious on the part of the peasants is still remarkably uncommon, even in centers of the grain trade, and is never met with in the interior, remote from rail-

road stations.

The owners of large estates who do not rent out their land do not deal with small market brokers. They usually have large stocks of grain to dispose of, and, in order to realize greater profits, they avoid one in the series of middlemen, which, in the organization of the Russian grain trade, is a very complex one. The large estate owner often deals directly with the large eommission merchant and the exporter.

Credit and Commissions.—In the sueeeeding stages of the trade the changes which have taken place during the last twenty years are more noticeable. These have been brought about by the introduction of modern institutions—railroads,

eredits, etc.

In the old system of marketing grain, business was conducted on a eash basis and was, accordingly, eentralized in the hands of comparatively few people. Large merchants in centers of production bought grain from small brokers or from large estate holders and sold it to merchants in the main distributing centers or to exporters. This method of conducting the business required large amounts of free eapital, and the concentration of business was especially noticeable in the export trade, which was practically monopolized by a few firms in St. Petersburg and Odessa.

Western commercial methods gradually permeated the export trade, and as this trade rapidly grew in importance the entire internal grain trade became more modernized.

Most important among the influences affecting the domestie trade was the introduction of the ercdit system. This system greatly enlarged compctition, since it enabled people with small capital to compete. Exporting firms either sell to some foreign importing house or buy in the internal markets on commission for a foreign firm. In either case, the exporting firms usually cash their drafts may foreign appearance in the cash of the cash their drafts upon foreign purchasers immediately after shipment of the grain, so that comparatively little capital is required to conduct the business.

Before the railway system was as extensive as at present it was the custom of exporting firms to store large quantities of grain in warehouses, but since the extension of the railway system an effort is usually made to ship as quickly as possible, and thus avoid the heavy expenses ineident to storing. With few exceptions, elevators in Russia are not equipped with machinery for cleaning or otherwise improving the condition of the grain and are used simply as storehouses. Similar influences extend even to the internal movement of grain. This does not mean that grain actually moves very rapidly over Russian railways, but there is always an effort to expedite shipment. Large numbers of dealers handling grain with litthe eapital and usually on credit are interested in expediting movement as much as possible.

Another change is the introduction of the commission business in place of a straight purchase. Southern exporting firms frequently keep their own commission agents in the wheat area instead of dealing with large local houses. On the other hand, all exporting houses now aet more and more frequently in the capacity of commission agents for foreign houses. Finally, within recent years, brokers have appeared, who volunteer to bring large producers into direct communication with foreign importers; they act as agents in all the complicated transactions. Large producers are attracted to this system by the hope of saving commissions to middlemen or, at least, of reducing them to a single payment for the services of the agent. But this system sometimes proves disastrons to producers by throwing the entire speculative risk directly upon them.

The general teudeney is toward a more rapid turn-over, with the assistance of eredit and, to some degree, toward the elimination of middle-men. The latter tendency is not asserting itself

very strongly as yet.

In the ordinary run of business, many middlemen stand between Russian wheat producers and foreign consumers—the small local broker who buys from the peasant, the large local dealer, the exporting firm and the foreign house. This, however, is the minimum number. In most localities, additional middlemen appear between the local primary buyer and the local large dealer; this is especially the case in localities not well provided with railway facilities. Where transportation is by water, the shipper of a barge of grain may become an intermediary between the primary buyer and the large internal grain house. Thus the large grain firms along the Volga, who sell and ship to the exporter, mainly to St. Petersburg, buy grain from the small local dealers who are not primary buyers. Russian grain may, therefore, go through the hands of at least four middlemen before reaching the foreign market, and two or three more may intervene before it finally reaches the consumer.

Aids to Quicken the Movement to Market .- Perhaps the most important influence which has helped to develop the eommission business and has also stimulated the entire grain trade was the railway and State Bank credit to grain ship-

This interesting financial venture had its origin in the early eighties through the private efforts of one important railway system. At that time the great majority of Russian railways were still in the hands of private eorporations. In 1884 the Southwestern Railway Company, in order to increase its traffic and to meet the competition of other railways, began to grant credit against shipments of grain to Odessa and to Konigsberg. As its funds for that purpose were soon found insufficient, it entered into combination with private banking firms. Credit transactions rapidly increased in number and the railway company soon petitioned the Ministry of Finance for a credit from the Imperial State Bank, because of the great expense of private credit. The ministry readlly perceived the great economic importance of such a system, and that, with the railways aeting as agents of the State Bank in these eredit transactions, the benefits would become diffused among a large number of actual grain producers and not be limited to large dealers.

The decision of the ministry was embodied in the law of June 14 (26), 1888, the main provisions of which were as follows: All the rail-

ways were made the agents of the State Bank for the granting of credit upon grain shipments; furthermore, the railways were empowered to establish grain warehouses and to issue warrants upon grain and to establish agencies for the sale of grain upon which credit has been granted. By the law of January 24 (February 5), 1889, the railways were also permitted to grant eredits from their own resources, provided that, in the opinion of the Ministry of Finance, the financial condition of the railways was such as to guarantee the payment of all the fixed charges. By this latter law the railways were also permitted to obtain credits from private banking institutions (if they could do so at less expense than from the State Bank),

The financial operations under this law remained comparatively small until 1893, when the State Bank decided to extend this activity "in order to prevent the too rapid marketing of grain and enable the producer to wait and distribute the marketing throughout the year." Thus the State Bank began granting loans either directly to producers or through local banks, besides loans

through the railways, as before.

The original limit to loans granted by the railways was 60 per eent of the value of the grain, and the operation of the law of 1888 was limited to three years. The time limit was extended in 1891 and the limit of the loan increased to 80 per cent. A second extension of the period during which the law was effective took place in 1894, and finally the limit was entirely removed. The extent of these operations is [very large, the loans in 1901 reaching about \$20,000,000].

In addition to the State Bank, private banks grant a great deal of eredit on grain. In 1899 the total credit upon grain granted by private banking establishments was \$69,308,000; in 1890, \$70,953,000, and in 1901, \$72,381,000. Thus, some substitute for warehouse certificates and for credit operation of elevators is found. The quantity of grain on which loans are advauced is considerable and the grain trade is considerably assisted thereby, but it is questionable whether the desired effect of holding the grain is thereby accomplished, since only 5 per cent of the credit granted by the state and by railways is given to producers, the principal beneficiaries being the grain merchants, who are thus given the means to quieken trade.

System of Marketing.—While the commercial methods of the Russian grain trade have undergone eonsiderable change, they are still very much

behind in the matter of an organization.

In general, it may be said that Russia has been striving for many years to adopt the methods of the American grain trade, but as yet with very different success. In the world market some of the competitors of the Russian wheat grower have an advantage over him in their more economical methods of marketing grain. Saving of expense in marketing may not be important to producers where they are limited in number and have a monopoly of a certain article and where selling prices are enough to cover waste; but the Russian grain producer, who has no such monopoly in the international grain market, is the main, almost the only, sufferer.

The main feature of the Russian grain trade

may best be described by indicating its negative qualities. It has few elevators, or, rather, while many elevators exist, only a very small part of the grain passes through them. There is no iron-clad system of types and grades; the grain which enters trade must, in the majority of eases, preserve its identity and be sold by examination of sample. In other words, in this respect the grain trade has not changed very much. The grain trade has not changed very much. cleaning and sorting of the grain, which was a function of the older grain dealers, with their large warehouses, were almost abolished without any organized elevator system being established.

The deeline in the quality of Russian grain as a result of this change in commercial methods [has been progressive]. The eonditions of Russian agriculture, which make the creation of an elevator system difficult, make it also desirable. The large proportion of impurities and the lack of regular grading of Russian wheat depress prices of Russian grain, as compared with American, in the European market; on the other hand, lack of sufficient storage facilities and need of ready eash force the grain to overcrowd the internal as well as the international market in the beginning of the eommercial season, and thus have a further depressing effect upon prices. The agricultural erisis of the eighties and early nineties has especially affected Russian agriculture, and has, therefore, made the need of elevators still more acute, since, in the effort to improve prices, the improvement of Russian grain and storage at times of depressed prices are of the utmost im-

The Straits of Maekinaw opened for navigation on April 19, when the Missouri passed through.

# ELEVATOR AND GRAIN NEWS

#### ILLINOIS.

Work is started on the Farmers' Elevator at Speer, Ill.

A farmers' elevator company has been organized at Chapin, Ill.

Work has begun on Thomas Ferguson's elevator at Magnet, Ill.

At Maroa, Ill., the Rowell Grain Co. is improv-

Ing its elevator.

A grain elevator will be put up at Roodhouse, lll., by Elmore & Lemon.

Prentice, Ill., is putting up its third elevator. The farmers are co-operating in its erection.

Harry Baker has purchased a half interest in the Felger Bros. grain business of Milmine, Ill.

The La Rose Grain Co., La Rose, Ill., is installing a new 20-horsepower engine at its Elevator No. 2.

Frank Hettinger, owner of the elevator at Harmon, Ill., is making improvements on his property

Mr. Felger's interest in the Felger & Sprague Elevator at Bement, Ill., has been bought by his partner, J. F. Sprague.

DeKalb County farmers are considering the question of organizing a branch of the Farmers' Grain Elevator Co. of Illinois.

The Burrell Engineering and Construction Co. has completed the Chesterville, Ill., elevator for Spellman & Spitly of Lincoln, Ill.

Cornell, Ill., farmers have organized the Cornell Farmers' Grain Co., of which C. E. Lishness is president and Sidney Johnson secretary.

J. Allen Smith & Co.'s new transfer elevator at East St. Louis, Ill., is to be constructed by the Burrell Engineering and Construction Co.

W. H. Perrine & Co. of Stronghurst, Ill., have ordered a 10,000-bushel Avery Automatic Scale of the Avery Manufacturing Co.. North Milwaukee, Wis

The Minooka Grain, Lumber and Supply Co. has been incorporated at Minooka, Ill., by Frank A. Cryder, Richard Coop and Joseph D. Dwyer for \$15,000.

The Dorans Farmers' Grain Co. has let the contract for a new elevator at Dorans Station, Ill., to the Burrell Engineering and Construction Co. of Chicago.

A new dealer in grain is the Farmers' Elevator Co. of Oneida, lll., having a capital of \$4,000. J. O. Finley, Hugh Greig and Arthur Holmes are the incorporators.

A new elevator, modern in every respect and having a capacity of 30,000 bushels, will be put up at Hagener, Ill., by the Beardstown Lnmber and Grain Co.

The Healey Grain Co., Healey, Ill., has been formed. The capital stock is \$6,000. The company will either buy the elevator now at Healey or build a new one.

A. E. Crum, William Niestradt and Theo. E. Hierman have incorporated at Arenzville, Ill., the Arenzville-Hagener Farmers' Grain Co., with a capital of \$10,000.

The Ohio Elevator Co. of Princeton, Ill., has increased its capital stock from \$6,000 to \$8,000. This company has handled, during the last year, 189,000 bushels of grain.

The contract for a new elevator, having a capacity of 50,000 bushels, has been let by H. H. Emminga of Golden, Ill., to the Burrell Engineering and Construction Co.

The Lomax Elevator Co. has been incorporated at Lomax, Ill., by William Sparrow, H. G. Crane and W. H. Wyatt, to do a grain and farm machinery business. The capital is \$5,000.

E. R. Ratliff of Leroy, Ill., has bought the grain elevator of Bartlett, Frazier & Co. for \$7,500, and took possession on May 4. Mr. Ratliff has been the manager of this elevator for two years.

The Neola Elevator Co. will conduct a grain business at Sheridan, Ill., at which point it is building an elevator to have a capacity of 40,000 bushels. Harold Flaherty will be the local manager

The grain business and elevators of Kirkpatrick. Lackland & Co., in Chenoa and Ballard, Ill., have been purchased by F. Y. Warner of Fisher, Ill., who took charge of the business May 1. Mr. Kirkpatrick is interested in land in Idaho, where

he lives, and Mr. Lackland and C. M. Bates, the other members of the old firm, own a good deal of land in northern Illinois.

The east elevator at Hinckley, Ill., opened for business May 1, with C. D. Wheeler as the new proprietor. Mr. Wheeler has installed a new 15-horsepower Fairbanks Gasoline Engine, has put in new dumps and made other improvements.

Secretary Strong, of the Illinois Grain Dealers' Association, reports the following changes in grain firms in Illinois since April 1: W. C. Calhoun, Concord, Ill. (mail to Franklin), succeeds Beardstown Lumber Co.; Bartlett, Knhn & Co. succeed W. J. Block at Bongard (Phila. P. O.); L. J. & R. W. Jeter succeed C. A. Burnham at Ashton; E. H. Kessler & Son succeed Chas. H. Hurbngh & Co. at Rapatee; Leo Raymond succeeds Baldwin Grain Co. at Panola (El Paso P. O.); Hanley & Carmondy succeed Rogers Grain Co. at Merna; W. S. Van Nalla, Jr., succeeds J. T. Sims & Son at Oakland; Calvin, Gambrel & Co. succeed Wiley, Marvel & Co. at Tabor; Farmers' Company succeeds Hill Bros. at Raymond.

#### IOWA.

Foster Bros. of Mediapolis, Iowa, are working on a new warehouse and grain elevator.

At Granville, Iowa, has been formed the Granville Co-Operative Grain Co., with a capital stock of \$25,000.

At a recent meeting of the Farmers' Elevator Co. of Rinard, lowa, it was decided to build a new elevator.

F. G. Behling has bought the J. M. Johnson Elevator at Napier, Iowa, which he will remodel and greatly improve.

The grain and coal business of James R. Moore at Emmetsburg and Rodman, Iowa, has been sold to the Royal Lumber Co.

E. L. Palmer, Kalona, Iowa, has bought the interest of his partner, Fred Hasty, in their grain, coal and produce business.

The Northern Grain Co.'s elevator and feed sheds at Goldfield, Iowa, have been bought by the new Farmers' Elevator Co. of that place.

At Fontanelle, lowa, Dunlap & Welch have let the contract for a new elevator to the Younglove Construction Co. of Sioux City, Iowa.

George Nau is the president of the newly organized Farmers' Elevator Association of Middletown, lowa, and A. W. Streed is secretary and treasnrer.

D. M. Riggs of Lone Tree, Iowa, has let the contract for the machinery for his new elevator to the Bnrrell Engineering and Construction Co. of Chicago.

The Farmers' Elevator Co, has bought the grain and coal business of James A. Carden, who has been in the business for fourteen years at Winfield, Iowa.

The Dillon Farmers' Elevator Co. has been incorporated at Dillon, Iowa, with a capital stock of \$10,000. W. R. Lippincott is president and H. E. Foote secretary.

R. J. Woody is enlarging his elevator at Cedar, lowa, by using the material in the elevator at Oskaloosa, lowa, which he recently purchased and is pulling down.

One of the best equipped elevators in sonthwestern Iowa will be built by the Grain Growers' Elevator Co. at Shenandoah, Iowa. The capacity will be 12,000 bushels.

Maurice, Iowa, has organized a farmers' elevator company, with John Linman as president and Peter Vass secretary. An elevator of 15,000 bnshels' capacity has been purchased.

S. J. Bnrroughs of Albion, Iowa, expects to have his new elevator, which replaces the one burned in April, ready for use by July 1. It will be an improvement on the old one.

A new elevator will be put up immediately at Fontanelle, lowa, on the site of the one recently burned. The cost is estimated at \$30,000, and the most modern machinery will be used.

Sibley, lowa, has a new Farmers' Co-operative Elevator Co. The capital stock is \$30,000; C. W. Solitt is president and Frank Kennedy treasurer. It is expected to begin business about July 1.

Paton, Iowa, has a farmers' elevator. A permanent organization was effected recently with William Pemble, president, and C. P. Walker, treasurer. The J. S. Williams Elevator has been purchased.

Council Bluffs, lowa, will have three new elevators, unless the unexpected happens in the shape of disaster to the grain crops of that section of the country. The Nebraska Hay & Grain Co. anticipates erecting a \$22,000 elevator; J. E. Van Dorn an \$18,000 one, and an addition costing

from \$75,000 to \$100,000 will be made to the Cavers Elevator, which is at present inadequate for the company's business.

The Younglove Construction Co, of Sioux City, Iowa, has closed a contract with the O. A. Talbott Co. of Keokuk, Iowa, for reinstalling its terminal elevator at that city with equipment and grain handling machinery complete, and with power.

By July 1 Whiting, Iowa, will have a new elevator to take the place of the one destroyed by fire on March 5. The building will be 32x39 feet, modern in every respect, and the machinery the most improved. The capacity will be 40,000 bushels.

#### EASTERN.

Albert Field closed up his grain business at Leverett, Mass., May 1.

Work is progressing on the Dalton, Mass., grain house of Griswold & Adams.

A. B. McCulis & Son Co. of Boston, Mass., has incorporated to deal in grain and flour.

The Thomas Ward Coal Co., a new corporation, will do a hay and grain business in New York City.

A five-story grain dryer will be built by the Reading Railway, at Pier B, Port Richmond (Station E, Philadelphia P. O., Pa.).

Grain and feed will be handled at the new warehouse, now in process of construction, of C. E. Seldomridge of Ephrata, Pa.

A new corporation has been formed at Saratoga, N. Y., known as Daniel Eddy & Sons, who will deal in grain, flour and feed.

Arthur C. King Co. has incorporated at Hornell, N. Y.; capital stock, \$10,000. The company will carry on a grain, hay and straw business.

The P. Schwartz Co. of New London, Conn., has been incorporated by Patrick Schwartz, Benjamin Shmark and William Shmark, to engage in the feed and grain business. The capital stock is \$15,000.

The Alliance Elevator Co. has been incorporated at Buffalo, N. Y., to deal in grain, cereals, hay and straw; capital \$25,000. Stoner W. Yontis, Henry T. Burns and Berend J. Burns are the incorporators.

A new manufacturer and dealer in grain, cereals, flour and feed is the Tioga Mill and Elevator Co. of Waverly, N. Y. The capital stock of the new concern is \$30,000 and the incorporators are W. T. Lane and A. C. Palmer of Buffalo, N. Y.; W. McCracken of Philadelphia, Pa., and C. F. Dyer of Waverly.

The Champlain Elevator Co, has been formed at Burlington, Vt., to handle flour, grain and feed in wholesale and jobbing trade on a large scale. W. L. Stone is president, and H. C. Burrows, secretary and treasurer of the company, which is backed by ample capital. A large plant will be erected soon, the plans being already in the hands of the contractors.

J. Cushing & Co., with headquarters at Fitchburg, Mass., and branch stores at Weston, Hndson, Cambridge. South Acton, Winchendon and Keene, N. H., will erect a large grain elevator at Winchendon, Mass., on the site of their grain store. With the new elevator a car of grain can be nnloaded in 30 minutes, while it now takes three men one day to unload a carload.

### SOUTHERN AND SOUTHWESTERN.

The Yukon Milling Co. is remodeling and enlarging its elevator at Minco, Okla.

The John W. Dickson Grain Co. of Hobart, Okla., has been incorporated; capital stock, \$10,000.

The Miller Grain Co. is rebuilding and enlarging its elevator at Wakita, Okla. It will have a 25,000-bushel capacity.

A large warehouse and grain store, to cost \$10,-000, will be erected at Dallas, Texas, for G. A. Knight & Sons.

The big elevator company at Sayre, Okla., has disposed of its business to a local corporation, formed to purchase it.

The Fort Worth, Texas, elevator of Mugg & Pemberton will have a big addition made to it, giving it a total capacity of 175,000 bushels.

The Farmers' Gin and Grain Co. of Fnlton County, Ky., has been incorporated by D. B. Wilson, W. C. Johnson and Frank Watson; capital, \$10,000.

Muskogee, Okla., now has an official weigher and inspector of grain, J. M. Hughes of Mnskogee, having been appointed to this office by State Grain Inspector Smith on April 22. Local grain men met the same day and made arrangements for the official inspection and weighing of carload

lots that pass through or arrive at Muskogee. Grain men claim to have lost much in the past by not being able to give official weights and grades in the state's name.

The Texhoma Mill and Elevator Co., Texhoma, Okla., will erect a 20x42 elevator, with a wareroom, 30x80 feet. The building will cost \$6,500, and the machinery, \$1,000.

The McDougal Grain Co, of Oklahoma City, Okla., has been incorporated by A. L. McDougal and G. A. White of Chicago and A. J. McMahan of Oklahoma City; capital stock, \$30,000.

Texhoma, Okla., is to have three elevators soon. T. R. Goodman, G. W. Cosby and F. G. Glassner will build one, J. L. Williams another and W. E. Benson a third. A flour mill will also be erected.

The stock of the Wilson Grain Co. of Bryan, Texas, has been bought by John Vick, who has also established a milling plant for grinding feed stuffs and cornmeal. He will operate the two together.

The McLemore Grain Co. of Nashville, Tenu., has been granted a state charter; capital stock, \$30,000. The incorporators are: E. A. Gordon, F. S. Gordon, J. B. McLemore, H. J. Connor and Bradley Walker.

The Liberal Elevator Co. is putting up an elevator at Hooker, Okla., to have a capacity of 25,000 bushels. This company is building a string of elevators located at Liberal, Tryon, Hooker, Optima and Guymon.

The large grain elevator and warehouse owned by the Hughes Warehouse & Elevator Co., at Nashville, Tenn., has been sold to the Kendrick-Roan Grain Co., which, however, will not occupy the buildings until late in the summer.

Pond Creek, Okla., is soon to have one of the best equipped elevators and corn mills in northern Oklahoma. H. E. Kelly and C. F. Brattain are the owners. The elevator will have a capacity of 15,000 bushels of wheat; the corn mill two carloads of corn chop and one car of cornmeal a day. Operations will begin about July 1.

#### OHIO, INDIANA AND MICHIGAN.

Casstown, Ohio, is to have a new elevator. A grain elevator to cost \$8,000 will be erected at South Whitley, Ind., by O. Gandy & Co.

Collier & Hauckman are putting up a 20,000-bnshel elevator at North Hampton, Ohio.

The B. H. Palmer & Son Elevator at Ashland, Ohio, is now owned by Palmer & Donley.

Johnson & Schroeder will build a new elevator at Pasco, a new station cast of Sidney, Ohio.

Dawson, Ohio, is to have a new modern elevator. The projectors are E. J. Griffis and E. C. Pope,

Hnfnagle & Gentuer will remodel their elevator

at Kewanna, Ind. Capacity will be 30,000 bushels. The Stafford Grain Co. is the name of a new corporation at Jamestown, Ind.; capital, \$15,000.

La Grange, Ohio, has a new corporation known as the Home Grain Co. The capital stock is \$10,000,

The building of a large grain clevator at Ingomar, Ohio, has been let to Becker Bros. of Eaton, that state.

W. S. Fogle of Broadway, Ohio, has sold his elevator and coal trade to D. J. Sanderson and I. W. Sinift,

The elevator business of A. J. Keary, at Menominee, Mich., has been purchased by G. E. Taylor of Lansing, Mich.

Fred Kamp is erecting a new elevator at Evansville, Ind., as his old one is too small to take care of his business.

The Winchester, Ind., elevator of Goodrich Bros. is being remodeled by the Burrell Engineering and Construction Co.

L. M. Ayres, for a long time with Johnson & Son, Goshen, Ind., will engage in the grain business at Bangor, Mich.

The Goodrich Bros. Elevator at Westfield, Ind., will be remodeled by the Buryell Engineering and Construction Co. of Chicago.

The G. G. Davis Elevator at Goldsmith, Ind., will be finished about June 1. The Burrell Engineering and Construction Co. has the contract.

The Hardin Grain Co. is carrying on business at its recently purchased elevator at Hardin Station, Ohio, formerly owned by O. S. Marshall & Son.

William R. Tompkins has sold his Linden, Mich., elevator to Charles R. Price of Munith, that state. Mr. Tompkins will return to Detroit.

W. B. Lynch of Crawfordsville, Ind., has purchased the elevator at Darlington, that state, for \$15,000. It was built by Mr. Lynch three or four years ago and sold by him to George M. Malsbary, who has since operated it. It is a large, substan-

tial elevator. Mr. Lynch has also bought the Darlington grist mill, which he will thoroughly overhaul.

The Burrell Engineering and Construction Co. has the contract to erect an elevator at Toledo, Ohio, for the Northwestern Elevator and Milling Co.

The elevator at Greensburg, lud., which the Burrell Engineering and Construction ('o. was putting up for the Garland Milling Co., is now finished.

Irwin Martin has bought the H. Hall interests in the Hall & Strickland elevator, at Plain City, Ohio, and the new firm will be known as Strickland & Martin,

The Barrett Grain and Elevator Co. succeeds Thomas & Barrett, at Greenfield, Ind., by the interest of Arlis Thomas being purchased by Benton L. Barrett.

Middleton, Ohio, is to have as fine a country elevator as is to be found in the state when William Sebald's new elevator is completed. Work is now under way.

`E. L. Odenweller of Ottoville, Ohio, is remodeling his elevator. The contract for machinery outfit was placed with the Philip Smith Manufacturing Co. of Sidney, Ohio.

S. S. Earhart is building a 20,000-bushel grain elevator at Burkettsville, Ohio. It will be equipped with Philip Smith Manufacturing Co. machinery and Foos Gas Engine of 15 horsepower.

Hehmyer & Son are remodeling their grain elevator at Coldwater, Ohio, and increasing the capacity to 30,000 bushels. The Philip Smith Manufacturing Co, is furnishing the machinery.

The Adlard & Persinger Grain Co. has been incorporated at Kirkwood, Ohio, for \$25,000. C. N. Adlard, E. T. Adlard, W. H. Persinger, J. E. Wells and E. T. Custenborder are the incorporators.

Fred Friedline is tearing out Sam Finney's elevator at Finney, Ind., and moving it to a new station, to be known as Greer, Ind. It will have a capacity of 4,000 bushels and be fitted with a Western Sheller and Cleaner and Gasoline Engine.

#### WESTERN.

Straw, Mont., is anticipating a new elevator.

Great Falls, Mont., may have a farmers' elevator in the near future.

A new grain and feed wholesaler at Sandpoint, Idaho, is G. E. Ross.

A 100,000-bushel wheat elevator will be erected at Twin Falls, Idaho,

Extensive wheat docks will be built at Portland, Ore., by the Hill interests.

It is expected that Dynamite Hanson will erect an elevator at Fallon, Mont., soon.

The Farmers' Elevator Co. of Quincy, Wash., will erect an elevator at that place soon.

The Western Lumber and Grain Co. of Lewis-

town, Mont., has been incorporated for \$100,000.

A grain and feed warehouse will be built at

Wallace, Idaho, by Smith & Corner. The cost will be about \$30,000.

The C. W. and M. Co. will erect an elevator and warehouse, also coal sheds, at Idaho Falls, Idaho, to cost about \$25,000.

The Coffin Grain and Milling Co. has been incorporated at Portland, Ore., by J. A. Yerex, F. H. Coffin and Jay H. Upton. The capital stock is \$30,000.

Moore, Mont., is to have three more elevators, to be put up by the Western Lumber and Grain Co., H. M. Welles of Chicago and the Farmers' Elevator Co.

The Burrell Engineering and Construction Co. of Chicago has the contract to erect a 40,000-bushel capacity elevator at Laramie, Wyo., for the Overland Cereals Co.

A grain elevator, handling four cars of grain a day, is to be built at Collins, Mont., and a spur of the Great Northern run to it. Collins is the shipping point for a large irrigated tract in Teton County.

An elevator having a capacity of 50,000 bushels will be put up at Belt, Mont., by the Royal Milling Co. of Great Falls, that state. This will be one of a line of elevators that this company expects to erect.

By August grain warehouses will be erected at Waitsburg. Prescott, Valley Grove, Hadley, Spofford and Walla Walla, Wash., by the farmers at those places, and it is probable that half a dozen others will be put up. Modern structures will be erected, and will be owned and operated by corporations of farmers. Each community will

pay for its own warchouse and each will be operated independently.

The Valley Grove Grain and Warehouse Co. of Walla Walla, Wash., has been organized; capital stock, \$10,000. The incorporators are Archie Dunnigan, John Yeend, Milo Gross, Philip Pentecost and James Yeend.

The Farmers' Union Warehouse Co. has filed articles of incorporation at Waitsburg, Wash., with a capital stock of \$40,000. The incorporators are D. C. Eaton, N. B. Atkinson, J. A. Danielson, W. H. Stonecipher, C. M. Taylor, Walter Price, F. T. Keiser, F. A. Jonas and Joel Woods.

Elevators of the type established in the middlewestern states and Canadian provinces will be erected in the wheat districts in the Spokane country as a result of the visit to Spokane and the tributary grain belts of A. D. Thompson of Duluth, head of the A. D. Thompson Co. Mr. Thompson has made a tour of the Big Bend and Palouse districts in eastern Washington, in which 40,000,000 bushels of wheat were produced in twelve counties in 1907, and he is so much impressed with the possibilities afforded that he will lay the proposition before his associates shortly with the view to early construction of the grain houses. Mr. Thompson intends to export direct from the points where the elevators are to be erected, thus cutting out the middleman at the water front, Railway officials say that wheat can be handled cheaper from elevators than from warehouses, and with one-third less equipment,

#### MISSOURI, KANSAS AND NEBRASKA.

The Farmers' Co-Operative Grain Association has been formed at St. Paul, Neb.

The Duff Grain Co. of Turlington, Neb., will immediately rebuild its burned elevator.

An elevator will be built at Potter, Kan., by a newly formed stock company of farmers.

W. D. Harry has recently sold out at Conway, Kan., and is now located at Kinsley, Kan.

Work on the new elevator of the Waggoner-Gates Milling Co. of Independence, Mo., is progressing.

A movement has been started at Monrovia, Kan., for the formation of a farmers' elevator company.

The Central Kansas Milling Co., of Lyons, Kan.,

will erect a 20,000-bushel capacity elevator at Chase, Kan.

Ainsworth, Neb., is to have a new elevator, of

50,000 bushels' capacity, to be erected by the Excelsior Lumber Co.

The Farmers' Elevator Association of Bucklin,

Kan., has completed its organization, and will soon begin work on an elevator.

The People's Elevator Co. of Rich Hill and But-

ler, Mo., will erect an elevator at Rich Hill to accommodate its increasing trade.

The Leroy, Kan., elevator finds an addition necessary to take care of its business. A two-story

structure, 24x24 feet, will be added.

James Eastridge will erect a large elevator at
Knights Station, Mo., for his son. Two acres of

land has been purchased for the purpose.

The Star Grain and Lumber Co. of Waverly, Kan., has installed in its elevator a 25-horsepower

gasoline engine to replace the steam plant.

The Hoffman Mill and Elevator Co. of Enterprise, Kan., expects to erect at Trinnell, Kan., an elevator having a capacity of from 26,000 to 30,000

The G. H. Dulle Milling Co.'s clevators at South Cedar City and Wooldridge, Mo., being erected by the Burrell Engineering and Construction Co., are completed.

The Paola (Kan.) Roller Mills has just installed \$1,000 worth of new electrical machinery for purifying flour. An elevator will soon be put up by this concern near its mill.

Mcssrs, Hammel and McCarty, of the Moran Grain Co., Moran, Kan., have sold their interests to J. J. Wilson and Jake Ensminger, also members of the former company. Extensive improvements will be made in the building and its capacity increased.

The Ewart Grain Co. of Lincoln, Neb., has purchased the Hopkins-Goodell elevators at Kramer, Crete and Wilber, in Nebraska. R. H. Ewart will have active charge of the business at Crete, and Mr. Goodell will retire for a time on account of poor health.

The Updike Grain Co., Omaha, Neb., is planning to erect a 1,000,000-bushel elevator by the side of its present 600,000-bushel elevator. It is expected that other smaller elevators, aggregating 900,000 bushels, will be put up this sea-

son, raising the total capacity of the Omaha grain elevators to 8,000,000 bushels.

The Updike Grain Elevator at Johnson, Neb., recently purchased by George Coryell, will be conducted as heretofore by the same local manager.

Dickinson Bros. Hay and Grain Co., Humboldt, Kan., succeeds the well-known firm of Dickinson Bros. F. W. Dickinson is president of the new corporation, and A. G. Dickinson, secretary and treasurer. A new elevator will be erected in Humboldt near the Santa Fe road.

The H-C Grain Co., Burrton, Kan., notice of whose recent loss by fire is given elsewhere in this issue, was preparing to rebuild its elevator, when difficulty arose in the shape of a fire-limit extension ordinance drafted by the City Council, which has not yet been disposed of.

About twenty farmers in the neighborhood of Stafford, Kan., at a meeting held recently decided either to buy the elevator now there or elsc erect a new one, modern in every respect and having a large capacity. A farmers' organization will doubtless be effected soon.

The contract has been let to the Burrell Engineering and Construction Co., of Chicago, for the crection of a large elevator in Springfield, Mo., by the John F. Meyer & Sons Milling Co. The capacity will be 125,000 bushels, giving this concern a total of 275,000 bushels' capacity in Springfield.

#### THE DAKOTAS.

Sweet Briar, N. D., is to have a new elevator. The Randolph, S. D., elevator has closed for the summer.

Art Reetz will erect an elevator at Corsica, S. D., soon.

The John D. Gruber Elevator at Tolna, N. D., is closed.

The Van Dusen Elevator has been closed at De Smet. S. D.

Smet, S. D.

A new farmers' elevator is talked of at Pier-

George Shanard has bought an elevator at

Emery, S. D.

The bonded elevator at Hansboro, N. D., has

been purchased by George McLean.

T. I. Gunderson is building a 24x24-foot addition to his elevator at Centerville, S. D.

Nels Lindgren has sold his elevator at Coulee,

N. D., and moved to Aberdeen, S. D.
A movement is on foot at Cresbard, S. D., to

establish a farmers' elevator company.

The Mooreton (N. D.) Farmers' Elevator Company has been incorporated for \$15,000.

The Kloten Farmers' Elevator Co. has been incorporated at Kloten, N. D., for \$50.000.

An elevator will be erected at Temple, N. D., this summer by Scott Smith of Ray, N. D.

Streeter, N. D., farmers have decided to build a farmers' elevator at that place this summer.

At Ashley, N. D., has been formed the Ashley Farmers' Elevator Co.; capital stock, \$25,000.

The Kraling & Greely Grain Co. of Coulee, N. D., has bought the Sullivan Elevator at Tagus, N. D. Crosby, N. D., farmers are among the many of that state who intend to possess a farmers' ele-

vator.

The North Dakota Farmers' Elevator Co. of Auburn, N. D., has incorporated, with a capital stock

of \$30,000.

The Royal Elevator Co. has been incorporated under the laws of South Dakota, at Mitchell, S. D., for \$250,000

A gasoline engine has been bought by C. B. Linderman for his new elevator now going up at Barlow, N. D.

At Sheldon, N. D., the Sheldon Farmers' Elevator Co. has been organized by thirty farmers. The capital stock is \$25,000.

Farmers near Driscoll, N. D., and in the surrounding townships expect to build an elevator at Driscoll in the near future.

The Battersby Grain Elevator at Artesian, S. D., is now conducted by a stock company of Jerauld County farmers, lately organized.

The new farmers' organization of Langdon, N. D., has decided to build an elevator of its own, instead of buying one of the line houses.

At Bathgate, N. D., E. E. Eastman, John A. Eastman and G. N. Craig have incorporated the Bathgate Milling Co.; capital stock, \$20,000.

A farmers' elevator company has been incorporated at Kaylor, S. D., for \$8,000, and will build an elevator at that place, L. Buege of Minneapolis having already taken the contract. John Brandt

is president and Andreas Baltzer secretary of the organization.

The Farmers' Elevator Co. of Hayti, S. D., has awarded the contract for a 30,000-bushel elevator.

The contract has been let for the building of its new elevator by the recently organized Farmers' Elevator Co. of Deisem, N. D.

The Farmers' Elevator Co. of Barney, N. D., has purchased the P. A. McGregor Elevator. The deal with the Ceres Elevator Co. fell through.

Capt. I. P. Baker of Bismarck, N. D., is making preparations to put up a large elevator on the reservation at the mouth of Beaver Creek.

W. C. Sanborn and William Long have bought the Sorenson elevator and store at Medberry, N. D. Mr. Long will have charge of the business.

The much discussed Farmers' Elevator Co. of McVille, N. D., did not materialize, on account of a lack of interest among the farmers of that section.

A number of farmers in the vicinity of Westport, S. D., are making arrangements to buy and operate the Columbia Elevator, which they hope to control by July 1.

Hayti's (S. D.) first elevator is now in course of construction. It will have a capacity of 12,000 bushels. Hayti expects to have five elevators before the summer is over.

J. W. Lahart, a well-known elevator man of North Dakota, is locating sites for a number of elevators in new towns along the new coast line of the Milwaukee Railroad.

The elevator at Willow City, N. D., formerly owned by J. E. Stewart, has been purchased by the Farmers' Elevator Co. of Brown's Valley, Minn., and will be remodeled.

The new Farmers' Elevator Co. of Ethan, S. D., has let the contract for an elevator, which is to have a capacity of 25,000 bushels and is to be one of the most modern structures in that part of the state.

At a meeting of farmers at Backoo, N. D., it was voted to incorporate a farmers' elevator company, to have a capital stock of \$7,000. The organization will probably be effected about the middle of May.

The new elevator at White, S. D., now in course of construction by Denhart & Alguire, whose elevator burned several months ago, promises to be one of the best equipped elevators of the Northwest when completed.

Woonsocket, S. D., farmers held a meeting recently for the purpose of taking steps to buy or build elevators at Woonsocket, Lane and Cuthbert, the three elevators to be under one management and the business done through one office, to be located at Woonsocket.

The Occident Elevator Co. of Spiritwood, N. D., contemplates building a new 40,000-bushel elevator on the site of the one lost by fire. It will be modern in every respect. The engine formerly used will be overhauled in Minneapolis and installed in the new plant.

#### MINNESOTA AND WISCONSIN.

At Plummer, Minn., the Homestead Elevator Co. has closed until fall.

The Western Elevator at Kuster, Minn., has closed for the summer.

The Andrews & Gage Elevator at New York Mills, Minn., closed April 27.

Con O'Brien of Brainerd, Minn., will erect a large grain elevator at that place this summer.

The Albertville, Wis., elevator, managed by

Fred Tapper, will be closed during the summer.

The Farmers' Elevator Co. at Wanamingo,
Minn., bought the Lonmis elevator for \$2,300 re-

The Plymouth Elevator Co. is rebuilding the old Peavey Elevator at Hadley, Minn., purchased some time ago.

cently.

The J. H. Russell Elevator at Royalton, Minn., has been acquired by the Powers Elevator Co. of Minneapolis.

The contract has been awarded for the erection of the Farmers' Elevator Co.'s elevator at Eden Valley, Minn.

Henry Broker, formerly of Royalton, Minn., has engaged in the lumber and elevator business at Melrose, that state.

The W. Seyk Co. of Kewaunee, Wis., has let the contract for its new elevator, which is to have a capacity of 40,000 bushels.

The Cargill Elevator Co. of Minneapolis, Minn., has let the contract for the erection of the 600,000-bushel addition to its elevator, which now has a capacity of 200,000 bushels. The contract amounts to about \$100,000, and calls for 24 con-

crete tanks, 20x90 feet. It is expected to have the addition ready by September 1.

H. W. Dietrich, Ethel Davis and E. L. Hamilton have incorporated the United Grain Co. at Superior, Wis. The capital stock is \$350,000.

The Northern Grain Co. is planning to build a new elevator at Bloomer, Wis. It is rumored that it may build one at Embarrass, Wis., also.

Litchfield, Minn., farmers have formed a farmers' elevator company and are erecting a large elevator at that place. The leader is John Werdin.

ford have incorporated the Door County Equity Elevator Co. at Sturgeon Bay, Wis. The capital stock is \$8,000. The Grand Republic Elevator Co., whose elevator

Louis H. Klenke, Luke Keogh and G. O. Whit-

at Superior, Wis., was burned down last November, will erect an elevator costing \$75,000 and having a capacity of 200,000 bushels.

The Northwestern Consolidated Milling Co. has let the contract for the execution of its respective of its contract for the execution of its respective of its contract for the execution of the execu

The Northwestern Consolidated Milling Co. has let the contract for the erection of its new elevator at Minneapolis, Minn. It will cost about \$250,000 and have a capacity of 1,000,000 bushels.

L. O. Hickok & Son of Minneapolis, Minn., have the contract to erect an elevator in that city for the Merchants' Elevator Co. The building will cost \$60,000, and have a capacity of 90,000 bushel.

The Schmid & Anderson Elevator Co. of Springfield, Minn., has let the contract for its new elevator at Vesta, that state, to replace the one destroyed by fire recently, and expects to be ready for business about the middle of June.

The W. P. Devereux Co. has bought of the Great Northern Railroad at Minneapolis, Minn., the elevator known as "Annex B" of the Union Terminal Elevator Co. Its capacity is half a million bushels. The purchasers will remodel it, installing electric power and making it modern throughout. This is the most important property transfer in grain circles this year.

L. H. Rice, G. R. Wilson and F. D. Long have incorporated at Park Rapids, Minn., to do a general elevator and milling business, operate lumber, wood and coal yards, handle hay and other farm products, also lime, brick, cement, etc. The capital stock of the company is \$50,000. Mr. Rice, proprietor of the present flour and feed mill at Park Rapids, is president; Mr. Wilson, vice-president, and Mr. Long, secretary and treasurer. The company will operate at other points, with main offices and mills at Park Rapids.

#### CANADIAN.

The Sperling Grain Co., Ltd., has been incorporated at Sperling, Man., for \$20,000.

An elevator will be built at Taber, Alta., by the Alberta Pacific Electric Co.

The Farmers' Elevator Co., Ltd., of Caron, Sask., has increased its capital stock to \$25,000.

An addition will be built by the Goderich Elevator Transit Co. of Goderich, Ont., to its present elevator.

Six 10,000,000-bushel elevators will be erected this summer on the Kam River at Fort William, Ont., by the Grand Trunk Pacific Railway Co.

The Canadian Pacific Railway will crect an elevator, having a capacity of 10,000,000 bushels, at Victoria Harbor, on Georgian Bay. The Canadian government will prepare the harbor for a great grain port. This project is for the purpose of diverting from American points the great western grain traffic of Canada. This elevator will be capable of handling about 60,000 bushels an hour, or the amount of one trainload over the new railway to be completed to the waters of Georgian Bay. The line will run from Montreal through Smith's Falls and Peterboro to Victoria Harbor, a distance of 359 miles.

The Capital Newspaper of Des Moines must be held responsible for this statement: "Specimens of real Indian corn, such as used to-be grown by the red men, and from which the present Iowa golden grains came, have been found by Secretary John Simpson growing in the State Fair grounds. The grain was propagated from specimens on exhibition at the fair last year. It will be watched with considerable care and will probably be used in demonstrating the advance of the corn culture in the last century. The Indian corn has about as much resemblance and stands in the same relation to the present Iowa corn as a South African monkey does to a man. The grains are flinty and each one is firmly covered over with an individual husk, which sets deep in the cob. Constant culture has brought about the present perfect grain."

## THE EXCHANGES

The directory on May 5 bid \$2,100 for Chicago Board of Trade memberships.

The Philadelphia Commercial Exchange members held their annual shad dinner at Essington Orchards on May 5.

Charles Kennedy, T. J. Stover and Frank F. Henry have been elected directors of the Buffalo Corn Exchange. Mr. Henry was elected to succeed H. T. Shuttleworth, who declined renomina-

No. 2 hard wheat will be put on the same basis as No. 2 red at Chicago. At the meeting of the Board of Trade directors on May 6 an amendment removing the 2c penalty on No. 2 hard was adopted.

The annual meeting of the Philadelphia Bourse was held on May 12, for the approval of the report of the directors prepared by Sec'y Emil P. Albrecht, and for the election of seven directors for three years.

Sec'y E. J. McVann's fourth annual report of the Omaha Grain Exchange has been published. It gives a full statistical statement of the grain business at that growing market, as well as a list of Exchange members.

The Chicago Board of Trade on April 23 began posting quotations made on the Buenos Ayres Grain Exchange of the same day. Since the opening of the Exchange the tendency of that market has been to get more than heretofore in line with Chieago, Liverpool, etc.

#### SEATTLE GRAIN RULES.

The grain committee of the Merchants' Exchange has proposed a modification of Rule 3,

relative to track selling, as follows:

"When a car of grain is sold as No. 1, or the usual deductions on lower grades, if the car does not contain 70 per cent of the No. 1 grade, the buyer is at liberty to reject the car and the seller shall either remove the car or make settlement as may be agreed upon."

The committee also proposes to modify Rule 4

to read as follows:

"The difference between No. 1 and No. 2 barley and oats shall be \$2 instead of \$1.50. Rejected grain shall be subject to private settlement.

#### MOISTURE TESTS AT CINCINNATI.

The directors of the Cincinnati Chamber of Commerce have adopted a report by the committee on hay inspection recommending that the rules for inspection of hay be amended making it mandatory on the part of the unloaders of hay to continuously unload a car of hay after it is started. As a penalty for failure to do this a charge of 60 cents will be imposed for each additional trip made by a deputy inspector when called to grade the same car of hay.

The following standards of moisture in corn were adopted: For No. 2 corn 16 per cent, for No. 3 corn 18 per cent, for No. 4 corn 20 per eent. These percentages agree with the standards adopted at Toledo, with the exception of No. 4, that market recognizing 21 per cent for

#### MILWAUKEE CHAMBER OF COMMERCE.

The annual election in April of officers of the Milwaukee Chamber of Commerce resulted as follows: President, E. C. Wall; first vice-president. Wallace M. Bell; second vice-president, E. J. Furlong; secretary-treasurer. Wm. J. Langson. Directors—For three years, P. P. Donahue, E. H. Dadmun, C. W. Schneider; for an unexpired term Dodsworth. Board of Arbitra of one year, tion-T. C. Coughlin, Walter Stern, A. H. Peterson, A. R. Templeton, W. J. Armstrong. Board of Appeals—J. J. Crandall. B. G. Ellsworth, C. B. Pierce, John Buerger, J. F. Howard. Chief Grain Inspector—Frank D. Hinkley. Chief Weigher— Frank F. Clapp.

Among the various committees to serve for the

ensuing year are the following:

Finance-E. H. Dadmun, C. W. Schneider and W. M. Bell. Market Reports-E. J. Furlong, G. C. Holstein

and J. A. Mander. Rules and Regulations-W. M. Bell, E. J. Fur-

long and P. P. Donahue. Transportation-Geo. Schroeder, Robert Eliot

and W. H. Dodsworth.

Supervisors of Grain and Weighing-A. K. Taylor, J. J. Crandall, J. M. Riebs, Jr., J. J. Brooks and D. G. Owen.

Arbitration of Grain and Clover Seeds-J. J. value has been arbitrarily ralsed by any combina-

Crandall, Louis L. Runkel, S. G. Courteen, L. Toweles and G. C. Holstein.

Committee on Membershlps-S. W. Tallmadge, P. C. Kamm, F. L. Farrell, C. F. Glavin and James B. Leedom,

The office of assistant secretary was created and Harry A. Plumb, formerly clerk in the office of Secretary Langson, was chosen. Mr. Plumb has been in the sccretary's office the past fifteen

#### INSPECTION OBLIGATORY AT TOLEDO.

The following rule has been adopted as a substitute for Scc. 3 of Rule 23 of the Rules and By-Laws of the Toledo Produce Exchange, and the same is now in force.

"It shall be obligatory upon every member doing business on this exchange to have all grain and clover seed consigned to or received by them officially inspected into regular and irregular clevators and warehouses in Toledo, and it shall also be obligatory to have all grain and clover seed officially inspected out, whether through billed or local billed, unless the same is sold by sample or by some other term, name or grade than the regular grade or grades established and published by this exchange.

"The regular fee established by the board of directors for inspection and weighing of grain and seeds shall be charged to the shipper on each account sales."

#### PORTLAND BOARD OF TRADE.

The Board of Trade of Portland, Ore., has been reorganized, or the grain section thereof, as a regular grain exchange, with daily sessions for trading in all cereals. Tables have been placed in the trading room for the display of samples of grains, and at each day's session considerable business has been transacted, though the first trade in this department was made only about the

On April 8 a meeting was held to prepare rules for operating on 'change, including all the functions of business usually falling within the juris-

diction of a public grain exchange.

One of the first steps in this direction was the unification of the official grades and grain standards of the Board with those of the Chamber of Commerce, by the immediate adoption of the latter's grades, samples of which are placed on the tables of the Board. And it is further proposed that the grain standard committee of the Chamber of Commerce shall act in the same capacity for the Board of Trade, it being the desire of the grain trade that the two organizations shall operate on the same basis, and that probably will be done. On April 11 the Chamber selected the following gentlemen to compose the said committee: Peter Kerr, chairman; Alex. McAyeal, secretary; W. J. Burns, T. B. Wilcox, R. Kennedy, C. E. Corry and Henry Lawshe.

On April 17 the following committee of five was appointed to go over the rules and regulations provided by Secretary Fred. Muller and submit their report to the trade: D. A. Pattullo, of Balfour, Guthrie & Co.; Frank McKee, of Kerr, Gif-& Co.; I. C. Sanford, of the Campbell-Sanford-Henley Co.; Frank L. Shull, of the Portland Flouring Mills Co., and Frank W. Swanton, of the Columbia Milling Co.

On April 20 San Francisco quotations were posted on 'change for the first time.

#### THE REJECTED ANTI-CORNER RULE.

The proposed anti-corner rule balloted upon by the Chicago Board of Trade on May 11 was defeated by a large majority. The rule reads that "in case the grain is not delivered on sales of futures at maturity the purchaser must either purehase the same for the account of the seller or require a settlement immediately, and any damages or losses due to either party shall be due and payable at once, and be based on the average market price on the day of maturity proposed amendment reads: "This rule, however, shall not be construed as authorizing the payment of extortionate claims based on the manipulation of the market. Any disagreement as to the market value shall be arbitrated on request of any party to the transaction by a committee of five disinterested members in good standing, to he appointed by the president, who shall organize at once, and without unnecessary delay hear and determine the case at issue. termining what the fair market price is on the day of the maturity of the contract this committee shall take evidence offered by any of the interested parties. In determining the market price the value in other markets for manufacturing and consumptive purposes shall be taken into consideration, and also all other facts, Irrespective of any fictitious price that may prevail at the maturity of the contract, and whether or not the

tlon or by an indlvidual. Whether or not there has been excessive short selling to depress prices unduly will also be determined. A majority vote of the committee shall be final, and the price established be the basis of all settlements. report of the committee must be returned in writing, and will be respected as final by the arbitrations and appeals committee. The notice of the appointment of the committee, with the members, and time and place of meeting shall be duly posted on the bullctin board so that all wishing to participate in the hearing may do

### CLEVELAND CHAMBER OF COMMERCE.

The directors of the Cleveland Chamber of Commerce on April 16 elected the following officers for the coming year: President, Dr. officers for the coming year: Chas, S. Howe; first vice-president, Chas. F. Brush; second vice-president, Geo. W. Kinney; treasurer, Chas. Paine; secretary, Munson A. Havens; executive committee, Thos. C. Goss, chairman; H. A. Higgins, Chas. A. Paine, J. B. Pearce and H. W. Strong.

The Chamber of Commerce has extended its activities by employing F. G. Bartlett as official hay inspector. Mr. Bartlett was formerly hay bnycr for the Raymond P. Lipe Co., of Toledo. Hereafter hay dealers represented in the Chamber of Commerce, who have signed the agreement to have all their cars inspected, may avail themselves of the inspection by notifying the secretary. The inspection will be at the car door and will cost 50c per car, to be charged to the shipper. In case of a reinspection, where the original grading is upheld, the cost is to be charged to the firm asking it.

[Special report made for the "American Elevator and Grain Trade."]

#### ANNUAL MEETING OF NASHVILLE GRAIN EXCHANGE.

On April 21 the Grain Dealers' Exchange held its annual election of officers at the Grain Exchange, in the Board of Trade Building at 12

The meeting was well attended, a large number of dealers from surrounding towns being present by special invitation. The election of officers followed the reports of all old officers, which showed that the past year broke all previous records in the matter of volume, and it had also been a profitable year for mid-territory dealers,

When the time came for the nominating of candidates for offices the slate had been made up and Byrd Douglas, the Alcalde of the grain fraternity of Nashville, was chosen president, succeeding himself for the third time. C. E. Rose was also re-elected vice-president; John Bell was added as vice-president, and W. R. Cornelius was re-elected secretary and treasurer. The membership of the organization had grown considerably in the last year and it was deemed advisable to have two vice-presidents instead of one, and the office fell to Mr. Bell.

Other than the election of officers, the organization had little business, and in the afternoon, however, the members were interested in viewing the numerous elevators, wharfs, etc., and the visitors especially spent the time very pleas-

In the evening President Byrd Douglas presided at the annual banquet at the Malwell House, where 125 guests enjoyed a splendid affair. Fully half those present were the wives or daughters of the members.

In his opening address President Douglas reviewed some of the work accomplished during the life of the organization. He said the Exchange was organized in April, 1903, and that each year it had accomplished much for its members. organized the Exchange had but thirteen members and 'now had fifty-five in good standing with several applications on the list to be acted upon at the next meeting. He opened the program by these remarks and then the banquet dinner was served.

With the last of this feature over president called upon numerous members, including Rev. Charles W. Byrd, Rev. C. R. Nesbit, I. T. Rhea. C. E. Rose, J. B. McLemore, R. H. Hughes and others, all of whom responded with something appropriate.

In the banquet party were the following guests: H. B. Wilkerson, R. James Gordon, Jim Andrews, Jr., Chas. A. Hill, B. W. Nowlin, J. B. Mc-Lemore, R. S. Willock, G. W. Pyle, E. C. Faircloth, M. S. Pilcher, K. S. Crittendon, Bessie Cooper, W. H. Crozier, Bessie Ford, T. M. Logan, Della Lee Logan, S. S. Kerr and wife, Eva McMurtry, Jamie Roddy, Annie Rhea, James S. Frazer, Mrs. James Frazer, Isaac T. Rhea, Mrs. I. T. Rhea, Albert Rothschild, Mrs. Thomas Newbill, Thos. Newblll, Mrs. Verner Tolmie, Verner Tolmie, Mrs. E. E. Laurent, Jr., E. E. Laurent, Jr., Miss Willie

H. Cadzow, Sam M. Allen, Jr., Mr. aud Mrs. M. K. Kendrick, Duncan McKay, Mrs. Duncan McKay, J. H. Wilkes, Mrs. J. H. Wilkes, H. H. Hughes, Mrs. H. H. Hughes, Miss Emma Hughes, Miss Jennie D. Worke, Robt. Rhea, R. J. Neville, Mrs. J. Neville, Mr. and Mrs. W. S. Porter, J. M. R. J. Neville, Mr. and Mrs. W. S. Forter, J. M. Wilkerson, H. M. Lawrie, G. H. Baskette, W. F. Cowsert, E. A. McCord, R. W. Hale, Harry Williams, John A. Tyner, F. S. Blair, Lee Douglas, Mrs. John Mrs. Jonnie, R. McNish, Mr. and Jno. W. Jordan, Miss Jennie B. McNish, Mr. and Mrs. W. J. Miller, Jr., Mrs. B. Coffman, J. A. Jones, Mr. and Mrs. Jno. W. Sneed, W. S. Tulloss, Mrs. W. S. Tulloss, Mr. and Mrs. J. K. Polk, Mr. and Mrs. George Harsh, Nathan H. Brown, Mr. and Mrs. Alex C. Harsh, Guy McGlothlin, Chas. W. Byrd, Jo. B. Morgan, Mr. and Mrs. S. C. Wilkes, Mr. and Mrs. M. H. Lillard, Mr. and Mrs. R. H. McClelland, Mr. and Mrs. R. E. Hickman, Mr. and Mrs. F. E. Gillette, Jr., Mr. and Mrs. Sam Wene, Mr. and Mrs. Tom Binns, Mr. and Mrs. B. F. Cornelius, Mr. and Mrs. Saml. G. Douglas, Harry J. Connor, W. B. McLemore, Jno. E. Gilbreath, T. H. Edmondson, H. B. Worsham, J. A. Williams, Cecile McCarver, J. T. Harrison, Mrs. J. A. Harrison, Mr. and Mrs. Jno. N. Gartner, Mr. and Mrs. W. Murray Hogan, Miss Sawyer, C. E. Rose, Mr. and Mrs. W. J. Miller, Byrd Douglas, Mrs. Byrd Douglas, Chas. R. Nisbet, Mrs. W. R. Cornelius, Jr., W. R. Cornelius, Jr., R. H. Worke, Mrs. R. H. Worke, John H. Bell, Mrs. John H. Bell, Mrs. L. L. Wade, John E. Potter, Mrs. John E. Potter, Jno. C. Bennett, Mrs. Jno. C. Bennett and Mr. and Mrs. E. C. Hawkins.

#### EXPORTING THROUGH GOVERN-MENT.

The Cape Government, South Africa, has undertaken to act as exporting forwarder of corn (maize), and has given notice that the railway department will receive consignments of maize at any Cape Government Railway statiou, dispose of same, on account of sender, in Loudon, at market price on arrival, and remit the amount realized by the sale of the maize, less 48 cents per bag if consigned from stations 150 miles or under from the port and less 54 cents per bag if consigned from stations within 151-300 miles from the port and less 60 cents per bag if consigned from stations over 300 miles from the port, to cover railway carriage, shipping charges, wharfage, customs entries, stamps, ocean freight, commission and other charges incidental to the conveyance to and disposal of the corn in the London market.

Corn will be sold on weight as ascertained at port of shipment, but, if necessary, an allowance of 2 per cent for cleaning and drying out in transit thereafter is claimed should it appear that such loss has occurred.

The name or private code of the sender, together with name or code mark of station despatched from, as well as a letter indicating the class of maize, must be shown on the bags, W indicating white corn, Y yellow and M mixed.

The minimum number of bags per consignment which will be accepted for export is 100 bags.

All bags must be new, double sewn and of 200 pounds full weight, net. To insure safe transit in those cases where consignors do not obtain their bags from the railway department, it is recommended that only 2½-pound bags be used.

All maize for export will be graded by the government grading officer at port of shipment. Each bag will be marked according to grade. Corn not coming up to standard will be marked, "Below grade."

A notice will be issued at an early date, giving the grading standards, and samples of the various grades will shortly be available for examination at the principal stations.

Corn which is not authorized by senders to be examined and marked by the government grader, appointed for the purpose at port of shipment, will not be allowed the benefit of the export rates, but will be subject to the ordinary railway tariff. The charge for grading corn not entrusted to the department for disposal, stamping the grade on bags and granting corresponding certificates, will be 1 cent per bag.

Corn found to be weevily before shipment will immediately be sold on account of whom it may concern, and will on no account be shipped. Moreover, where weevils manifest themselves prior to grading, the ordinary and not the export rate will be levied.

lowa had unseasonably cold weather with cold winds, occasional snows and abnormally low temperature during the first week of May. Plant life made little progress; but some work of getting soil ready was done. All kinds of small grain, pastures and meadows are in good condition. Corn planting should now be general. The first week closed with copious rains falling over southern counties.

## COMMISSION

The United Grain Co. of Superior, Wis., has been incorporated with a capital stock of \$350,000 by Geo. E. Dietrich, H. W. Dietrich and Ethel Davis

George F. Reed, a well-known Boston grain exporter, is en route to the Mediterranean ports and will study export conditions, especially of the Grecian ports.

J. C. Robb, a grain commission merchant at Wichita, Kan., has occupied new and larger quarters, his former offices having been takn by the Gorvin Flour and Grain Co.

Hulburd, Warren & Chandler, stock brokers and commission merchants, Chicago, have moved from 212 La Salle St. to the ground floor of the Corn Exchange Bank Building.

John P. Hernes, who was with Bartlett-Frazier for several years, has been eleted to membership on the Chicago Board of Trade, and has gone on the floor for King, Coleman & Co.

Benjamin R. Browu, formerly a member of the firm of W. H. Sterling & Co.. Chicago, has engaged in the grain and provision trade on his own account at room 219, Royal Insurance Building,

Whitney & Gibson of Buffalo, N. Y., have incorporated for \$15,000 to deal in grains and cereals. The incorporators are Henry V. Backus, Rochester; Bertha T. Corliss, Tonawanda, and Edmund Thomas, Buffalo.

James G. Martin has resigned as president of the Northern Grain Co., with headquarters at Manitowoc, Wis., and has been succeeded by R. L. McCormick of Tacoma, Wash. Chas. Esplin has been elected secretary and treasurer of the company.

The Consolidated Grain and Hay Co. has been incorporated at Cincinnati, Ohio, Henry J. Good, an active member of the Chamber of Commerce, being at the head of the company. His associates are Jos. B. Keeley, H. G. Hauck and C. B. Duzenbery. The capital stock is \$10,000.

J. J. Townsend & Co. are now occupying new offices in the Counselman Building, Jackson Boulevard and La Salle Street, Chicago, after appropriately "christening" the quarters with champagne and a buffet lunch, served to the many friends of the senior member of the firm, James J. Townsend.

The Chicago commission firm of Pringle, Fitch & Rankin was dissolved on May 1 by the retirement of James A. Rankin, Pringle, Fitch & Co. succeeding. The firm is now composed of Robert Pringle, Walter Fitch, William D. Card, T. W. Browning and Leeds Mitchell. The present quarters at No. 1 Board of Trade will be retained. William D. Card, the new partner, is a New York stock man.

Henry L. Goemann of Toledo, Ohio, ex-president of the Grain Dealers' National Association and well known iu all the terminal markets, will be married June 10 to Miss Edith Philo of Sheridan Park, Ill. No wedding bells in June will ring more in tune, nor will well wishes and congratulations be limited by Mr. Goemann's many friends in the trade when this happy consummation takes place. After a bridal trip Mr. and Mrs. Goemann will make their home in Tolcdo.

T. A. McIntyre & Co., brokers, with headquarters in New York, and branches in other cities throughout the country, suspended on April 24, when Arthur R. Peck was named as assignec. Subsequently C. C. Burlingham was named as receiver in bankruptcy by the United States Distriet Court. The liabilities were estimated at \$1,000,000 and the assets at \$50,000. The firm dealt principally in stocks and cotton, but at the time of the suspension was credited with having 2,000,000 to 3.000.000 bushels interests in the grain market, mainly in wheat. The concern did no elearing of its own grain, and its interest in the Board of Trade markets was merely in the way of exchanging grain business for stock or cotton orders with other houses. Closing up of these trades left open by the failed house, therefore, was expected to be carried on cautiously, and to have a minimum of effect on the market. The house had given business in grain to several leading houses recently, but since April 1 there had been a policy of curtailment which resulted in the removal of the firm's private telephone service on the exchauge floor. Up to that time Emil Dictzch had been the floor manager of the concern, but since then there had been no active representative. The firm had offices in the Home Insurance Building, Chicago, with M. D. Herron as manager. Employes in Chicago ascribed the failure to being long on cottou and short on stocks, in addition to the heavy drain incident to maintaining an exteusive private wire system. The spread of sinister rumors concerning the stability of the firm precipitated a demand for the withdrawal of cash balances and stocks, which crippled it.

## SPECULATION HAS SOME ABUSES.

Exchanges can remedy some of the abuses, and should do so, says Frank I. King, Toledo. The New York Stock Exchange listing committee has it in its power to do much to restore confidence. Will they do it, or drift along and rely upon returning prosperity to make the people forget the past? New York Journal of Commerce, which has some of the best editorial writers in the country, says:

says:
"The worst abuses of speculation are not to be but outside of them; and found on the exchanges, but outside of them; and it is carrying these into the stock market for the consummation of their purposes that creates the greatest scandal. In the promotions, exploitations and combinations of reckless financiers, by which securities are created in inflated volume and of fictitious value, is the root of much of the evil. These securities are emptied into the stock market, many of them listed on the exchanges, with false pretense and misrepresentation, and the element of gambling enters largely into dealings in them. It takes time to sift them down to their real value and in the meantime many victims are fleeced by those 'on the inside.' There is a way of manipulating stock of an established character, indulged in by men of standing in the financial world, that is scarcely less disreputable. are 'on the inside' of the management and operation of great corporations and have knowledge of conditions and of plans that is kept from others who have an equal right to know. They plan for new issues of securities, or the conversion of old. for an increase or a decrease of dividends that they can control, which they know will have a certain effect upon the market value of stocks, and they use their knowledge and the advantage of their position in the market to make large profit at the expense of others. They use the tactics of the blackleg to filch the money of the unwary."

### DISTANT CORN FUTURES.

Corn purchased ten days ago is now arriving in Chicago. There are also arrivals of corn moved here by shorts to deliver on May contracts. The April cash demand has been somewhat light, but there are no bulky accumulations.

Providing the May contracts are merchandised, and the outlook is that there will be no hitch, the corn situation is strong. The deferred futures are emphatically too low as compared with the cash stuff. The fact that corn is selling at a record price has held the trade from assuming a bullish attitude on the later crop months. This has led to quotations that mildly and blandly presume the farmer will cut his price about 15 or 20 per cent in ninety days. This presumption is not warranted by the situation. The wealthier class of corn raisers are holding their coru back until the new crop is secured. Even with rosy government reports through the summer, it will take stiff prices to coax good corn to terminal points. The run of corn due about June 1 will be a spasmodie affair. The June receipts at Chicago and other terminals will very evidently be a disappointment to the extreme bears, as the very heavy early 1908 run undoubtedly drained the cribs.

The new crop is being seeded with extreme care, but the necessary seeding tests were so laborious that wide complaints of poor seeds are forecast by a couple of well-known agricultural journal editors.

There has been some talk of Argentine corn to be shipped to New York. These rumors can be disregarded. European prices are so high that they will attract all Argentine offerings. To land corn at New York is one thing and to distribute the grain quite another. Cost of this distribution and duty would lift the cost to around 70 cents for low grades. United States corn is the corn wanted by home consumers.—E. W. Wagner, April 25.

"Freight Meeting" of Ohio and Indiana shippers on May 1 at Piqua was well attended. Mr. Harry Kress is to be congratulated for getting so many shippers to attend. Freight rates were discussed, with the result that most of those present were convinced that present rates were about as near perfect as they could be. Meetings of this kind are certainly beneficial, as many of those who attended this one stated.—J. F. Zahm & Co.

## COURT DECISIONS

[Prepared especially for the "American Elevator and Grain Trade" by J. L. Rosenberger, LL.B., of the Chicago Bar.]

## Purchasers Against Whom Landlord's Lien May Be Enforced.

The Supreme Court of Kansas says, in the case of Mangum vs. Stadel, 92 Pacific Reporter, 1093, that the statute gives the landlord a lieu on the crops of his tenant for the payment of the rent. The lieu may be enforced against the crop after it has passed into the hands of a purchaser with notice of the lieu, wherever it can be identified, by a proceeding against such purchaser to recover the value of the crop purchased to the extent of the unpaid rent and damages.

To charge a purchaser of a crop grown on rented land with notice of a landlord's lien, actual knowledge of the lien is not necessary. If the purchaser has knowledge of facts which naturally exeite inquiry, and one that reasonably leads to a knowledge of the lien, it is his duty to inquire, and testimony sufficient to require inquiry is testimoney of notice. A person cannot be a bona-fide purchaser who has brought to his attention facts which should have put him upon inquiry, an inquiry which, if pursued with due dilegence, would have led to a knowledge of the lien.

In an action of a landlord to recover from a purchaser of a crop grown upon rented premises and subject to a lien the value of such erop to the extent of the unpaid rent, the burden of showing that the purchase was made with notice of the lien rests upon the plaintiff.

## Rights of Buyer Deceived as to Quantity of Unhusked Corn.

Ordinarily, the expression of an opinion or belief by a vendor as to quantity or value, although false, is not a basis of action or ground of relief. Where, however, the parties do not stand upon a basis of equality, where the vendor assumes to have knowledge and asserts an opinion upon a matter of which the vendor is ignorant and the misrepresentations are made with intent to deceive, the vendee who relies upon them and is injured by them is not without remedy.

And where, in an action, a party seeks to recoup for deceit practiced in the sale of unhusked corn, where there is testimony that the vendor had knowledge and experience which enabled him to determine the quantity of corn in the field, and that the vendee, who was without knowledge or experience in that respect, relied on representations and assurances of the vendor fraudulently made that there was a certain quantity of corn in the field and the sale was made on that basis for a certain price per bushel and it turned out upon measurement that there was less than onc-third of the stated quantity, the Supreme Court of Kansas holds (Abmeyer vs. First National Bank of Horton, 92 Pacific Reporter, 1109) that the representations of the vendor were more than mere expressions of opinion and belief, and whether they constituted a fraud on the vendec was a question of fact for the jury.

#### A Valid Elevator Law.

The Supreme Court of North Dakota says (State vs. Minneapolis & Northern Elevator Co., 114 Northwestern Reporter, 482) that Chap. 113, Laws of that State, 1907, which is entitled, "An Act requiring elevator companies transacting business in this state to return certificates of inspection and weighmaster's certificate of weight to the local buyer," and which provides for the return of such certificates by the elevator companies, etc., to their local agents, and also that the latter shall post the same in a conspicuous place in the elevators, does not contravene Sec. 61 of the state Constitution, which requires that no bill shall embrace more than one subject, which shall be expressed in its title. The subject or object of the act is to furnish information to the public of the facts which such official certificates will impart, and the provisions of Sec. 2 requiring local agents to post such certificates in their elevators are germane to the provisions of Sec. 1 and hence to the subject embraced in the title of the act.

Such act is not vulnerable to the objection that it contravenes the provisions of the interstate commerce clause of the Federal Constitution, as its operation will not directly or remotely interfere with interstate commerce; but its enactment is a legitimate exercise of the police power of the

The elevator company's contention that the law is void because it attempts to make acts or omis-

sions committed in a foreign state a crime in this state is not sustained. The conditions on which foreign corporations are permitted to do business in this state are within the legitimate power of the state to prescribe, and the defendant corporation, having been authorized to transact business in this state, is amenable to its laws enacted under its police powers to the same extent as its citizens.

#### GRAIN CLEANER DECISION.

A permanent injunction has been granted against the Prame Manufacturing Co. in the Circuit Court of the United States for the Northern District of Ohio (Eastern Division) as follows:

Albert T. Ferrell, complainant, vs. Frank J. Prame, defendant.—In Equity: Final Decree.—This cause came to be heard this 26th day of March, A. D. 1908, before Hon. Robert W. Taylor, holding the Circuit Court of the United States for the northern district of Ohio, eastern division, upon the pleadings and proof on file in said cause, including exhibits and stipulations of counsel attached thereto: and the court hear the arguments of counsel therein.

From consideration of all which, the court find the equity of said cause is with the complainant, Albert T. Ferrell, as against the defendant, Frank J. Prame, and that the complainant is entitled to the relief as prayed for in his complaint herein.

It is accordingly adjudged and decreed that the defendant. Frank J. Prame, his agents and servants and all persons acting or claiming to act under or by virtue of his authority, direction or control, cease and desist from the further manufacture and sale of grain or seed cleaners or separators as now done and carried on at the city of Galion, Ohio, or elsewhere in the United States, and from any further attempt to advertise, sell or dispose of said cleaners in the United States.

And the said Frank J. Prame be and he hereby is perpetually enjoined from engaging either directly or indirectly in the manufacture and sale of grain and seed cleaners or separators anywhere in the United States and from allowing his name to be used in any manner in connection with the manufacture and sale of such machines.

It is further ordered and dccreed that the said Frank J. Prame pay all the costs of this suit, and that execution may issue therefor.

## SHORTAGES AND THE BILL OF LADING.

The Dominion Marine Association has had prepared a draft bill of lading which it was proposed should be used at least by all grain carrying vessels. It omits the objectionable shortage clause which appears in the present bill and sets out the reasonable exemption from liability contained in the Harter Act of the United States, and in the Australian act of similar purport.

This bill of lading was just being put in force for the 1908 season of navigation, although the shippers had refused their assent, when Senator Campbell's bill respecting the water carriage of goods was introduced in the Senate. The bill is based upon the United States and Australian statutes.

'The Dominion Marine Association rather favored this bill, subject to certain very necessary and very reasonable amendments which would bring it more into accord with the Harter Act than the Australian statute. It is proposed, for instance, to use wherever necessary the words of the United States statute, requiring "due diligence" on the part of the owner in the matter of seaworthiness, so that there will only be a warranty to that extent, and the owner will not be responsible for latent defects where he has taken all proper care. It is proposed, too, that the permitted exemptions should include the additional oncs set out in the Dominion Marine Association's draft bill of lading, and, further, that in Section 7 it should be required that the bill of lading should state whether the weight or quantity is the carrier's or the shipper's, as any other requirement would be unfair to the carrier; also that in a separate section the shipper should be required to expressly limit the value of the goods if desired; also that notice to the consignee should only be required at the address, if any, given for that purpose in the bill of lading, and that the penalty for default regarding notice should duly apply accordingly.

The hill has been discussed at two sittings of the Banking and Commerce Committee of the Senate, and a strenuous opposition is being presented by the transatlantic lines, whose hills of lading are very long and intricate documents.

Washington had been complaining of lack of moisture and from frosted wheat; but recent rains have greatly benefited the crop.

## IN THE COURTS

Lonis E. Daly, a grain buyer and farmer of Barry, Big Stone County, Minn., on April 11 filed a bankruptcy petition in the United States Court at Fergus Falls, placing his assets at \$300, all exempt, and his liabilities at \$3,284.

David H. Grant, receiver, has been appointed trustee in bankruptcy of the Parker Grain Co. of McPherson, Kan. He reports the liabilities as \$160,000 and assets \$60,000, the latter consisting mainly of a line of elevators on the Santa Fe road, some farm lands and 30,000 bushels of wheat.

Proceedings to restrain W. P. Kinahan, Lee Metcalf and the Wabash Railroad Company from constructing a grain elevator in the village of Lanesville, III., have been filed in the Circuit Conrt of Sangamon County. The commissioners of highways are the complainants and they claim that the site belongs to the village.

Horace E. Kinney filed suit in the Superior Court at Terre Haute on May 1 against the Southern Indiana Railroad Co., claiming \$1,200 damages. The plaintiff alleges that the carrier was to transport a carload of wheat from Blackhawk to Indianapolis, but that the wheat never reached the latter city. The claim is for the wheat.

The Des Moines Elevator Co. has brought suit against the M. & St. L. Ry Co., alleging that the railway company had failed to furnish ears on time and thus caused grain stored in elevators at Callender, Pioneer and Clare to spoil and deteriorate in value to the amount of \$1,500. The plaintiff alleges that it had 20,000 bushels stored in the elevator at Clare, 17,000 bushels at Pioneer and 12,000 bushels at Callender and that the company agreed but failed to furnish cars to transport the grain at once either to Chicago or Des Moines.

George Brown, a farmer of Osage County, Kansas, some months ago sold a quantity of wheat to the Michigan Valley Elevator Co., taking a check for \$167. He carried the check several weeks before presenting it. In the meantime the elevator company failed, and the bank attached the wheat in the storehouse for debt. Brown presented his check and demanded cash or the return of his wheat the bank refused to do either and disposed of the grain. Brown then brought suit for the value of the wheat. It was proven that the identical wheat delivered by Brown was in a separate bin when attached and also that an agreement had been made between the bank and the elevator company to cash all checks, taking a lien on grain. Decision was rendered by the trial court on May 2 for Brown.

The Cleveland Grain Co. has begun suit at Lafayette, Ind., against Storms & Co., grain dcalers at Clark's Hill, for breach of contract; damages elaimed, \$210. The plaintiff company avers that on July 24, 1907, it contracted with the defendants for the delivery, within sixty days, of 2,000 bushels of No. 3 mixed oats and 2,000 bushels of white oats. Excesses in delivery on prior contract amounting to nearly 1,400 bushels were credited on the July contract. Partial deliveries were made on the contract in Oetober and an extension to March 1, 1908, was granted by the plaintiff. After that date it was compelled, the company avers, to go into the open market and buy oats at advanced prices to fill contracts it had made because the defendants had failed to deliver all the oats stipulated in their contract. The sum of \$210 is the difference between the contract price in July and the price paid by the company in the open market in March.

Mo. Pac. and St. L., I. M. & S. R. R., former Freight Traffic Manager W. C. Smith, and T. H. Bunch, grain dealer of Little Rock, were cach indicted by the United States grand jury at Little Rock on April 17 on the charge of allowing rebates on freight and receiving rebates. There are fifty-eight counts in each indictment, the penalty in each being a fine of \$1,000 to \$20,000, and the fines, if assessed, may vary from \$232,000 to \$4,640,000. The defendants explain that the indictment is based on a technical violation only of the law. Grain originally billed from points in Kansas to Little Rock, with milling-in-transit privileges at Little Rock, was shipped from that city to points in Texas and Louisiana at a less rate than the first tariff stipulated. After the grain had left Kansas points, a new tariff became effective. This new tariff, which specified a lower rate than the previous one, was applied to the grain when reshipped from Little Rock to Southern points. It is held that the first tariff, which

was effective when the grain left the points of origin, should have applied to the points of destination.

The Republic Elevator Co., whose elevator in Superior was burned a year ago, has started a suit in the District Court at Duluth to recover \$638.85 from the Close Hardware Co. of Hibbing for an alleged breach of contract to take two carloads of the grain salvage. The elevator company claims that the defendant agreed to take two carloads, one at \$15 per ton, and the other at \$3 per ton, that the grain was transported to Hibbing, but was refused by the consignee.

#### ARBITRATION DECISIONS.

The following arbitration decisions have been filed with the secretary of the Grain Dealers' National Association by the committee on arbitration:

Kirwan Bros.' Grain Co., Baltimore, Md., plaintiff, vs. Loudon & Co., Cincinnati, O., defendants.—On September 28, 1907, the defendant sent plaintiff by mail a sample of three carloads of off-grade wheat, held at 94 cents, export rate delivered Baltimore. On September 30 the plaintiff wired: "Will take three cars ninety-four. Answer by telegraph immediately, stating quantity." Defendant replied: "Confirm about thirty-four hundred bushels at ninety-four cents. The letter correspondence confirms the transaction as above."

On October 5 the defendant shipped, to apply on this sale, one car, No. 9585, containing 62,000 pounds, according to his invoice; on October 7 car No. 92546, containing 60,620 pounds, according to his invoice.

On October 9 car No. 9585 arrived at Baltimore and inspected, "Projected wheat, warm, weevil, damp, mow-burnt." The certificate by the chief inspector, Charles McDonald, shows: "Wheat contained in car No. 9585, now on track at Locust Point, billed to Kirwan Bros.' Grain Co., is warm and full of live weevil, and, for this reason, cannot be unloaded into elevator. Sample shown me by Kirwan Bros.' Grain Co., said to represent purchase sample, does not show weevil.'

On October 9 plaintiff wired defendant as follows: "Ninety-five-eighty-five warm, damp, weevil; five cents discount best possible. Instruct." On October 10 the defendant wired plaintiff as follows: "Three cars all alike. Shall we ship third car?" To which plaintiff wired reply: "Wheat must be free from weevil. Will cancel one car or all; you pay us ten cents." On October 12 the defendant wired plaintiff: "Letter 10th received; have sold third car same price. Other two yours. Protect yourselves." Car No. 92546 was inspected at Baltimore, October 15, "Rejected wheat, damp, mow-burnt, weevil, warm."

The correspondence and evidence disclose the fact that the wheat was sold by certain sample which was received by plaintiff, and was not damp, nor warm, nor did it show weevil; consequently said sample must necessarily represent the quality and character of the wheat covered by contract.

The evidence shows that the two cars that were shipped arrived warm, damp and containing live weevil. The evidence also shows that the difference in value between purchase sample and actual wheat at Baltimore, as determined by special arbitration committee, was 4 cents per bushel. Evidence shows that the defendant declined to ship the third car, unless plaintiff would agree to take it, as well as the other two cars which had already been received at Baltimore, without discount from original price.

The decision of the committee is that the plaintiff is entitled to his claim of 4 cents per bushel on cars No. 9585 and No. 92546, amounting to \$83.77; also to a difference of 11 cents per bushel, being difference between price of contract and price at which balance of sale was canceled at Baltimore, being the advance in wheat market, as substantiated by official reports, amounting to \$149.27.

Judgment is hereby rendered for the plaintiff for \$233.04. Costs of arbitration to be paid by defendant.

H. S. GRIMES, Chairman, C. C. MILES, E. M. WASMUTH,

Committee on Arbitration, G. D. N. A. April 16, 1908.

BY THE TEXAS ARBITRATION COMMITTEE.
The following decision has been rendered by the
Arbitration Committee of the Texas Grain Dealers'

Association:

Jockusch, Davison & Co., plaintiffs, vs. J. E. Ervine & Co., defendants.—The evidence offered in this case shows that the plaintiffs bought of defendants seven cars of No. 3 or better mixed corn at 64 cents per bushel, delivered Galveston on domestic rate, settlement to be based on Gal-

veston weights and inspection. Both parties confirmed and their confirmations agreed in so far as these particulars are concerned.

The corn was duly shipped, four cars grading No. 3 or better; two cars inspected no grade and one car No. 4. The two cars which inspected no grade, the plaintiffs took into account at 5 cents per bushel dock, and the car which inspected No. 4 they docked 1 cent per bushel; and they make claim against defendants for the amount of these docks, which, in addition to discrepancies in weight on the other cars, makes their claim \$111.41.

This claim the defendants contest; and make the contention that the plaintiffs have no claim on them for docks on the cars which missed grade, because plaintiff proceeded to unload these cars without notifying them, the defendants, of their condition, thus giving them an opportunity to relieve plaintiffs of these cars and permitting them to dispose of them in Galveston and furnish to plaintiffs other cars of contract grade to replace them. Defendants further claim that after taking these cars into account at contract price and allowing them credit for gain in weight on several of the other cars, plaintiffs really owe them \$47.69, and they make counter claim for this amount

and they make counter claim for this amount.
Finding this specification, "It is expressly agreed and understood that the grain named herein is to be shipped as per the terms of this contract, and can only be bought in or canceled with our consent, and that grain of lower grades, as well as any surplus over contract quantity, will be taken in at market values upon date of arrival," in plaintiff's confirmation of purchase, to which defendants did not object, the committee is of the opinion that the corn not of contract grade should have been accounted for by plaintiff at its actual market value upon date of arrival at Galveston, viz., October 4, 1907; and the committee having called upon both plaintiff and defendant for evidence tending to show what this market value was upon the date referred to, the following evidence along this line has been submitted:

By plaintiffs: Letter from J. Rosenbaum Grain Co., stating that their bid on October 2 for No. 3 or better corn, bulk, delivered Galveston, was 62¼ cents per bushel and that their dock on no grade depended upon its condition after having been dried.

Letter from E. F. Newing, stating that on October 2 he was bidding 65 cents for No. 3 or better corn, delivered Galveston, for shipment within seven days, and 62½ cents for shipment during the entire month of October; that his discount on No. 4 corn was 2 cents per bushel and that no grade corn was taken into account according to grade after drying.

Letter from the Home Grain Co., stating that they sent out no bids on October 2, and that it was their custom to dock No. 4 corn 2 cents and no grade from 5 to 8 cents.

By defendants: Letter signed by Texas Star Flour Mills, stating that they made no actual purchases of corn on October 4, but considered No. 3 or better mixed corn worth about 72 cents, delivered Galveston, domestic rate.

Letter signed by Wisrodt Grain Co., stating that they would have paid on October 4, 67½ cents for No. 3 or better corn, delivered Galveston.

Letter from J. S. Fordtran, stating that according to his records, bulk No. 3 or better mixed corn was worth 67½ cents per bushel, delivered Galveston on October 4.

It seems from this evidence that corn for domestic use in Galveston was worth several cents per bushel more than the exporters were offering for it; and since we are of the opinion that the defendants were cntitled to the highest market price for corn not of contract grade, we think it has been clearly proven that No. 3 or better corn was worth 67½c per bushel, bulk, on the Galveston market on October 4, and that the plaintiffs should have taken these three off-grade cars into account on this basis and should have made their docks on the two cars which graded no grade 5 cents per bushel and on the car which graded No. 4, 2 cents per bushel. We, therefore, award the defendants judgment against plaintiffs for \$29.94, as follows:

\$3,940.09 \$3,940.09

It is therefore ordered that the plaintiffs, Jockusch, Davison & Co. promptly pay to the defendants, J. E. Ervine & Co., at Houston, Texas, the amount of this award, \$29.94, and the secretary is instructed to return defendants its deposit fee.

C. L. MOSS, E. R. KOLP, T. G. MOORE,

- Committee. Attest: H. B. Dorsey, Secretary, Fort Worth.

## HAY AND STRAW

Russell & White have let the contract for a 10-ton alfalfa mill at Nickerson, Kan.

Edgar T. Clark of Milford, Conn., has sold his hay and grain business to E. E. Oviatt of Bantam, Conn.

Alexander H. Smith contemplates establishing a mill to manufacture alfalfa meal at Arlington, Texas.

Wellington, Kan., hopes to have the experimental alfalfa mill that the state is figuring on starting.

Mr. Gordon is putting up a large alfalfa shed at Industry, Kan., to replace the one that hlew down recently.

The El Dorado Alfalfa Milling Co. of El Dorado, Kan., has been granted a state charter. It is capitalized at \$25,000.

The American Alfalfa Co. of Wichita, Kan., has agreed to establish an alfalfa mill at Marion, Kan., if that city will put in a bridge.

There is talk of an alfalfa mill for Canton, Kan., but no organized effort in that direction as yet. A capital of \$7,000 is necessary.

F. A. Cummins, W. W. Damplin and W. W. Freeblood, all of Hobart, Okla., have incorporated the Alfalfa Milling Co. of Hobart, with \$15,000 capital stock.

A new gin is to be erected at Aline, Okla., in combination with an alfalfa mill, at a cost of about \$15,000. G. W. Graham, F. L. Barnum and others are managing the enterprise.

At Sedgwick, Colo., Wertz Bros. of Chappell, Neb., are preparing to put in an alfalfa meal plant, to cost about \$12,000. They expect to have the machinery in readiness for this year's crop.

An alfalfa mill will be established at Echo, Ore., by J. E. Murphy & Co. Power will he secured from the Henrietta Flouring Mill. A \$50,000-plant will be installed. The plant will have a capacity of 500 tons a month.

Work on the new alfalfa mill at Minneapolis, Kan., is progressing. The building is to be 132x30 feet, with an engine house 36x30 feet, built of cement blocks. June 1 is the date fixed for the operation of the mill.

An alfalfa meal mill company is one of the anticipated enterprises of Hutchinson, Kan. A mill of large capacity will be built. Alfalfa has been grown in that part of Kansas in large quantities for a good many years.

Henry J. Good of Cincinnati, Ohio, a member of the Chamber of Commerce, has incorporated the Consolidated Grain and Hay Co., capitalized at \$10,000. Associated with him are Joseph B. Keeley, H. G. Hauck and C. B. Duzenberry.

Clinton, Okla., is responsible for the statement that in that section there will be \$5,000 worth of alfalfa sown this year. Elm, located in the same county, expects to own up to \$500 of this amount, as every farmer around that town is sowing from one to five bushels.

The officers elected at the annual meeting of the St. Paul (Minn.) Hay and Grain Exchange of the St. Paul Board of Trade were J. A. Tierney, chairman; F. J. Brings, vice-chairman; C. C. Gray, treasurer; W. H. Patten, secretary; advisory board, J. A. Dolenty, C. R. Rank and C. Hubbard.

· Word comes from San Bernardino, Cal., that the much-needed rain in that section arrived April 22, and has saved the hay and grain crop. For a month previous hot north winds had threatened to ruin completely the late sowed hay and grain, but now prospects are encouraging for a good crop.

Capitalists of Dodge City, Kan., are seriously considering building a mill in that city for grinding alfalfa. An agent of an eastern machinery factory has been in the city furnishing those interested with cost estimates of mills and information regarding the workings of such machinery.

The region around Cheyenne, Okla., seems to be especially adapted, both by climate and soil, to the raising of alfalfa. This fact, together with the increasing acreage now being devoted to this product, justifies the prediction that the county of Roger Mills will soon be one of the leading alfalfa counties of the new state.

It is said at Shawnee, Okla., that the alfalfa crop of Pottawatomie County will be larger this year than ever before, and probably the largest in the state. It is estimated that the new acreage planted in alfalfa is more than 1,500 acres. The alfalfa mill at Shawnee, the first in the

state, is increasing its capacity on account of the big demand for alfalfa products. Seed dealers have had difficulty in supplying the demand for alfalfa seed

The Salina (Kan.) Alfalfa Mill Co. has received its charter from the state, and Is now erceting a mill, which it hopes to have in operation by June 1. The capacity will be 50 tons a day. The incorporators are F. H. Quincy, F. D. Shellabarger, J. O. Wilson, E. W. Ober and H. D. Underwood., The capital stock is \$50,000.

An important industry practically assured for Kennewick, Wash., is an alfalfa mill. Sufficient capital has been subscribed by business men to make possible the completion of a \$5,000-mill, and it is expected that construction work will begin soon. The promoters will grind the alfalfa into various kinds of meal for horse food, cow food, hog food, and, in fact, every kind of food for which alfalfa is known to be especially adapted. The immense production of alfalfa in the Kennewick district leads the investors to believe that no better locality could be selected in Washington for such an enterprise.

A stock company, composed of R. A. Harper, Louis Boelder, F. D. Morrison and W. P. Bunyan, has been organized at Fowler, Kan., with a capital of about \$10,000, and will erect an alfalfa meal mill at that point. Harry E. Edwards, former assistant manager of the Meal Milling Co. of Kansas City, the largest establishment of its kind in the United States, will be general manager and will superintend the construction. A steam engine having a power of 75 or 100 horses will be installed and only the best machinery used. The building will cover a space of 45x65 feet. The mill will run both night and day, and the daily output will be about 15,000 pounds of meal.

Receipts of hay at Pittsburg are still light, says the Hay & Grain Reporter, and "there is a fair demand for all sorts and grades of hay at quotation below, and shippers are advised to use the present market, which compares well with the general conditions as they exist. On account of the unusually wet weather, shipments have been curtailed. Prices have been sustained by this detention. When the weather permits shipments will increase, and it is not likely that prices will advance after the next general movement of hay to the different markets, and the guess the Reporter makes is for a lower range of values during the first half of June, hence the advisability of quick or prompt shipments at this time. The demand for prairie hay is restricted. Straw is cheaper packing to date; good fine packing is moving at about \$7.50 to \$8." Quotations— Timothy, \$9.50 to \$15, according to grade; clover mixed. \$10 to \$13.50; clover, \$9 to \$14; prairie, \$6.50 to \$9.50.

#### CAR STORAGE FOR HAY.

The New York Hay Exchange has begun an attack on the car storage rule in force in that city against all commodities except coal and coke. The original rule, in force in 1902, called for \$1 demurrage for forty-eight hours. The new rule, in force November 15, 1907, covers with it this \$1 charge for two days; for the next two days, \$2 a day; \$3 a day for the next two days, and \$4 for each succeeding twenty-four hours. This new rule does not apply to Jersey City or the terminals of the Long Island Railroad. That is where, it is charged by the hay dealers, discrimination comes in.

The hearing came up before Charles A. Prouty, Interstate Commerce Commissioner, on April 28. Counsel were present for the Pennsylvania, Baltimore & Ohio, Long Island. New York Central, West Shore. Erie, New York, Ontario & Western, Lackawanna, Lehigh and the Central of New Jersey railroads, the conduct of the defense being by George S. Patterson of the Pennsylvania.

It was brought out in the course of the hearing

It was brought out in the course of the hearing that the receipts of hay in New York City amount to from 50,000 to 75,000 carloads a year, valued at from \$3,000,000 to \$5,000,000.

George C. Coffin, for the hay men, stated the ease. He said that the new rule was a discrimination; that if enforcement were continued it meant that the hay business would go to lersey City or to other points where the heavy charges were not in effect. In Jersey City, he said, the hay was received, the consignee informed, and it was then lightered to its destination, the timo consumed also eliminating the old car service charges. At stations in New York City the cars are received and the two free days are consumed in informing the consignee and in receiving his answer. He contended that demurrage is almost a foregone conclusion on every load of hay, as the first charge would come in for the third day or a fraction of it; and should there be delay In disposing of the consignment the charges under the new rule would be doubled, and so on, eating up the profits to the shipper.

Charles J. Austin of the Hay Exchange and president of the State Hay Association, the first witness, said that three-fourths of the hay sent to New York comes on consignment; that some Is bought for speculative purposes, but very little; that the railroads should have storage facilities; that some said they had, but what they did have is inadequate. It was brought out that hay shipped to New Jersey is frequently held on the meadows.

Mr. Patterson tried to bring out that hay commission men use the ears for warchouse purposes while disposing of their consignments, as the old demurrage rate, he said, was cheaper than storage would be. Mr. Austin would not admit this. He was compelled to repeat practically all that Mr. Coffin had said in his opening, laying especial stress upon the assertion that the new rule would ultimately drive the bulk of the business out of the city. There is intercity business now, he said, between Jersey City and New York City, and he felt that this would end by the business being all one way. The case was adjourned until May 26.

#### KIRWIN ALFALFA MILL.

The alfalfa mill, for reducing the hay to a meal, as a more handy product to ship as well as to render the fibrous portions of the hay more available for use by poultry, etc., has become a



KIRWIN ALFALFA MILL.

permauent industry in the alfalfa country of the West, or wherever this most valuable "fodder grass" shall be grown.

A great deal of alfalfa is now ground and sold either with or without mixture with other substances. A good deal of it is mixed with molasses, and this combination of protein and carbohydrates makes an excellent feed. Dairymen and others who have tested it consider it very useful, and if it can be produced at a price to allow it to compete with other feeds its use will increase every year, says the National Stockman. Western farmers in the alfalfa-producing territory claim that it pays to convert alfalfa into meal because in feeding they claim greater efficiency for the ground alfalfa as well as greater convenience in handling and in ability to mix with other feeds.

The illustration, which is a picture of J. J. Landes' "Kirwin Alfalfa Mill" at Kirwin, Kau., is that of a typical mill of the best class and of economical size, being equipped with a Williams Grinder with a capacity of 1,800 to 2,400 pounds per hour, operated by a 75-horsepower Atlas engine.

[From Farmers' Bulletin 320, Dept. of Agr.]

#### BERMUDA HAY.

Some of the first experimental work begun by the Oklahoma Station was a series of grass-culture tests, which was subsequently extended into cooperative experiments with farmers throughout the state. The earlier results of this work have shown that of the different grasses grown Bermuda grass alone possessed the requirements of a pasture grass for Oklahoma conditions, and more recent experience with this species also indicates its superior value for hay as compared with the wild grasses. The following brief report on the yield of Bermuda hay obtained at the station is of interest in this connection:

The two and a half acrcs of upland soil that was planted to hardy Bermuda grass on June 29 and 30, 1905, has been cut for the third time this season. The first cutting in the season of 1906 was made June 12. The total yield of cured hay from the field was 13,145 pounds, or at the rate of 5.658 pounds per acre. The second cutting for 1906 was made August 2. The rainfall from June 12 to the time of second cutting was 6.53 inches. Before the second crop was fully cured it began raining again and 5.36 inches of water fell on the

hay before it was hauled in and weighed August 15. This thorough leaching reduced the weight materially, but the final weight of dry hay was 7,275 pounds from the two and a half acres, or 2,910 pounds to the acre. The third cutting was made September 18, and the hay cured without being rained upon. The total yield of cured hay for the field was 7,840 pounds, or at the rate of 3,136 pounds per acre.

The total yield of hay per acre for the season was 11,704 pounds or 5.08 tons. Land of the very same nature adjoining this field does not produce over one-half ton of prairie hay of inferior quality. Bernuda hay contains twice as much digestible nutrients as the best of prairie hay, is much more palatable, free from stems and weeds, and in every way superior to hay made from wild grasses. It is time Oklahoma farmers were beginning to wake up to the possibilities of this remarkable grass, not only as a pasture grass but also as a hay crop.

Compiled from Oklahoma Sta. Rpt. 1907, p. 21.

#### MEETING OF HAY GROWERS.

The North Louisiana Hay Growers' Association met on April 28 at Shreveport, La., in the Progressive League office. At this meeting plans were perfected for marketing hay.

Wholesale dealers, by vote of the Association, are to be protected by a differential of \$1 over prices charged retailers and consumers. A charge of 25 cents a ton was fixed for all hay sold through J. J. Kline, the Association's broker.

Clarence Ellerbe, of the Louisiana Railway and Navigation Company, informed the Association that his company would transport to New Orleans free of charge any alfalfa the association members wished to send to that market in order to acquaint it with this product. Mr. Ellerbe was given a rising vote of thanks by the Association.

[For the Michigan Hay Association.]

#### WHAT IS HAY?

BY CLINTON D. SMITH, Director of the Michigan Experiment Station.

Hay is properly cured leaves, stems and flowers of either grasses or certain legumes, cut while imparture

Before discussing what hay really is it may be well to note what hay is not. In the first place, hay is not weeds, but grass or legumes properly cured. Among the weeds which infest our Michigan hay and which are easily preventable should be named, first, the fleabane (erigeron philadelphicus, if the blossoms are pink, or annus, if the blossoms are white). I assume that all of you know this weed at sight. In some specimens of timothy sent from this state 10 per cent by weight has been this weed. It seeds abundantly and propagates itself with somewhat startling rapidity. It should be eliminated by plowing and by a rotation of crops for three or four years and reseeding. By subsequent applicatious of commercial fertilizer or manure, the fleabane ought not be a pestiferous factor in hay.

A second weed that is coming into the state is the black-eyed Susan (rudbeckia hirta). This weed has come from the West in timothy seed. It is not a desirable addition to hay and ought to be excluded. You will note the stiff stem and bright yellow flower with black center. My suggestion is that your patrons be encouraged to pull out this weed and burn it. The flower does not have to ripen in order to have seeds grow.

The third weed is the common ox-eyed daisy (Chrysanthemum leucanthemum). This weed I noted through a host of meadows in western New York, and I also note that it is spreading widely in Michigan. Our experiments this year go to show that it may be held in check by spraying with a 20 per cent solution of sulphate of iron. Hay is not this weed properly cured, no matter how green it is cut. It is true, of course, that the weed is fairly nourishing and that it contains a good high percentage of protein, but it is not a desirable mixture with hay. It is not hay. It is an adulter ant

Another weed is our ordinary mustard (Brassica sp.). This weed we have killed readily in oats this year with a 20 per cent solution of sulphate of iron, one treatment being sufficient. You, gentlemen, should co-operate with the farmers in retarding the spreading of this vile weed. Unless there be concerted action on the part of the men interested in agriculture, mustard is going to spread until it causes a great increase in cost of our Michigan crops.

The same is true of the dandelion. This weed Is easily held in check with sulphate of iron, which I have mentioned. I do not know that even two sprayings with the sulphate of iron will kill it, but it will certainly hold it in check and prevent its seeding.

The Canada thistle and the quack-grass have come into Michigan to stay. In order to encourage

their destruction I should cut the price of hay offered for sale, containing either of these weeds. I used to believe that Canada thistle seed would not germinate and grow. I know better now. It will. Fully 33 1-3 per cent of the thistle seed will grow into thistle plants. Quack-grass spreads mostly by the roots, but it will spread also by seed. These two are, in my estimation, the most dangerous weeds in the state, and as director of the Experiment Station I beg your co-operation in discouraging their growth. Farmers ought to find that it pays to kill them. They will not destroy them until they find that it does pay to do so.

I have purposely reserved to the last a rather new weed and a rather new crop. I refer to dodder in alfalfa. I ask your close scrutiny and the exertion of your best recollection that every one of you may recognize dodder seed in alfalfa when you see it. East of Adrian certain alfalfa fields were absolutely ruined by dodder. This dodder is of two or three species, it is true; but if you recognize the seed of one the similarity will point out the others. My mission here will largely have failed unless you, gentlemen, take time enough from your other arduous duties to note in your mind the characteristics of the seeds of these weeds, if, indeed, you do not remember the weeds themselves, which I assume all of you will do.

In the second place, hay is not the leaves, stems and flowers of grasses or certain legumes properly cured, but cut when mature. It is not these plants cut too young. Some ten years ago Professor Crozier and myself became interested and noted the difference in yields of two equal areas growing orchard grass, one pastured and the other cut for hay. The pasture was imitated by frequent mowing with a lawn mower provided with the proper sack for catching the clippings. Between the 26th of April and the 8th of June the pastured area gave us twenty-nine pounds, while the equal area was cut on the 8th and yielded just 100 pounds of cured hay. In 1896 the two plots were reversed, the one heretofore pastured was cut for hay and the one heretofore cut for hay was pastured. Four cuttings were made yielding 60.9 pounds of dried clippings, while the area cut for hay on the 26th of May gave us 1121/2 pounds of cured hay.

In another field the same experiment was performed with timothy. The "pasture" plot was cut eight times and yielded 15.76 pounds of dried clippings. On the date of the last clipping the equal area was cut for hay, the product being 172 pounds of cured hay. Combining the results of the three trials we have from the frequent clippings in imitation of pasture 95 pounds of hay; from the same area at a single cutting 384 pounds, or almost exactly four times as much.

You say at once the young grass is much more nutritious. To determine how far this fact might offset the greater gain in weight chemical analyses were made. The dried clippings contained 22.62 per cent crude protein, while the timothy contained 7.81 per cent. When this crude protein was examined, however, it was found that the timothy hay contained 1.05 per cent of albuminoids, or true protelds, while the eight cuttings of timothy contained but 1.45 per cent of albuminoide nitrogen. Now, it is generally agreed among scientists that amid nitrogen is not as valuable as the protein nitrogen, and this large amount of amid nitrogen in young grass ought not be reckoned of equal value with the true protein in comparing it with Carbohydrates are about the same in each. The crude fiber is much greater in the hay. On the whole, therefore, I must admit that the young grass is much richer in food value than the hay, but, acre for acre, the hay gives two or three times as much nutrients as the pasture. As a business proposition a man can scarcely afford to pasture his high-priced lands. Better, by far, allow the grasses to grow to the right size to cut for hay.

On the other hand, over-ripe grasses do not make hay. They make grain and straw. Oats, a true grass, may be cut for hay, or for grain and straw, as the farmer may choose.

Some experiments going forward at the Agricultural College convince me that if all the owner is after is the greatest yield of protein per acre he would better cut his oats in the milk and cure them as hay, rather than allow the seed to ripen. Timothy should not be allowed to mature before entting. Some experiments at another station do not indicate but demonstrate that the time in the life of the timothy field when it will give the greatest yield or best hay is just as the plants are coming into bloom, not after the seed is formed. Your further attention is called to the fact that maturing the seed is the exhausting effort of the timothy, and if it is desired to maintain the meadows, the timothy must be cut much greener than some of our farmers have been in the habit of cutting it. What is said of timothy is also true of clover. You will get a greater yield per acre, weight alone considered, if you will allow one-eighth of the blossoms to turn brown, and

it is far wiser to mow just after the bulk of the plants are in full bloom.

I deem it safe at this point to urge the use of orchard grass as a crop for hay. It requires more intelligence to properly handle it than timothy because orchard grass will not permit the beginning even of the ripening process. The straw becomes very woody directly after the heads are formed, so orchard grass must be cut very You cannot mix orchard grass with timothy for hay. You may mix it with alfalfa and very properly so, but it matures much too quickly to be mixed with timothy. grass is rather early for clover, as timothy is late for it. The second proposition in this paper is that hay includes alone the grasses and legumes properly cured but not cut when im-The third proposition is that in order to make hay the leaves as well as the stems and flowers must be retained. This means methods of curing must be selected with this end in view. Alfalfa makes an excellent hay if the leaves are left on it. It is a far different hay if cut so late as to cause the loss of the bulk of leaves. The same thing is true of clover and of timothy. This means that hay must be properly cured. Except in one case I do not know that the loss from improper curing has ever been estimated, but reason teaches that drenching with rain with alternate exposure to the blistering sun must cause not only loss of palatability but of sugar and other soluble ingredients.

This brings up the question of the wide use of the side delivery rake and hay loader. Without going into the details of the discussion I think it is fair to admit that where hay is raked as soon as wilted and put into the cock, there to cure for at least twenty-four hours before upsetting, further drying and hauling, we get a better product than where the hay is allowed to lie In the swath direct from the mower, after tedding, and then haul direct to the barn. It is evident that drying out in the sun more slowly is more effective so far as palatability is concerned than quick drying in the intense heat of the summer sun. On the other band, considering the scarcity of labor and the consequent high price, I feel justified in urging the use of the hay loader. Otherwise hay is going to be allowed to stand until too ripe before cutting.

Some recent experiments carried forward at the Agricultural College indicate that the continuous growng of grass is not as exhaustive to the soil as we have been led to believe by theorists. Two adjacent fields were treated differently for ten years. One was kept continuously in grass, the hay being removed; the other was kept continuously cultivated without any crop whatever, simply kept free from weeds, plowed each spring and thereafter kept fallowed. In 1906 both fields were planted to corn, when we found at harvest time that the field which had borne grass continuously gave a great deal larger yield than the field which had lain fallow all these This does not show a very rapid exhaustion of the soil's fertility. The crop of oats on the two fields this year indicates a better crop from the meadow than from the fallow field.

### WHEAT IN ASIA MINOR.

According to experts, Asia Minor has excellent wheat-producing soils and is soon destined to surpass the Danube countries in annual output. In normal times wheat is an article of export. the peasants and large landowners would follow a rational plan of farming, supported by some practical system of effective irrigation and artificial manuring, there would never be a famine in this country. The practice of sowing wheat every other year upon arable land will always result in erop uncertainty. The soil of the deltas of those rivers which flow into the Black Sea is especially adapted for wheat growing. So are the valleys of the Hermus and Macander rivers. A few levees here and there along the river embankments, or a deepening of the channel at overflow points, would prevent the annual inundation usually proves so destructive to crops. Some of the best qualities of wheat are cultivated on the plains of Erzerum. Among the mountain ranges of northern Asia Minor wheat is seldom grown. Corn and oats are the grain of that section.

The future of Asia Minor as a wheat-growing country is bright. There are still boundless tracts situated miles away from any railway, without even a caravan route as a means of communication, which have never seen a peasant's plow since ancient times. Many a fertile valley in the interior is now practically producing nothing, for the reason that there is no way of marketing the crop. The unsettled condition of the country and frequent brigandage in many districts also retard the progress of agriculture,—Consul E. L. Harris.

## FIRES--CASUALTIES

The grain elevator at Star City, Ind., was burned to the ground on the night of April 25.

The National Elevator at Hannah, N. D., burned on April 16. It contained but little grain at the time.

On April 12 the Manchester, Ill., warehouse of Elmore & Lemon of Ashland, Ill., was destroyed by fire.

At Turlington, Neb., on April 16, the large frame elevator of the Duff Grain Co. was totally destroyed by fire.

At Hamburg, lowa, on May 6, the elevator of Frank McBride burned. The insurance on both plant and stock is \$4,000.

Sparks from a locomotive caused a damage of \$10 to the elevator of the Exchange Grain Co. at St. Louis Park, Minn., recently.

The Farmers' Grain Co. Elevator at Grand Harbor, N. D., was totally destroyed by fire recently. The insurance amounted to \$6,000.

Burglars dynamited two safes in the grain store et Youland & McManus in Lynn, Mass., on April 20. They got away with \$1,600 or \$1,800 in cash.

The grain elevator of the R. Heger Malting and Brewing Co. of Jefferson, Wis., was destroyed by fire recently. Loss, \$6,000, with very little insurance.

The Imperial Elevator at Mowbray, Man., was completely destroyed by flames April 18. The cause of the fire is unknown. The insurance covers the loss.

Damage to the extent of \$100 was done by lightning, on April 23, to the elevator of the Pacific Elevator Co. at Hanley Falls, Minn. The total insurance is \$4,000.

The Pacific Coast Elevator Co. sustained a fire loss at Seltice, Wash., April 19, amounting to \$5,000, insurance \$3,800. The fire was caused by sparks from a locomotive.

The Canadian Northern Elevator at Eden, Man., containing between 6,000 and 7,000 bushels of wheat, was devoured by fire about the middle of April. The loss was about \$5,000.

Fire, started from a cigar stump, destroyed a large warehouse at Frankfort, Ky., April 21. The warehouse stood at the rear of Heiss' feed store and was filled with grain and hay.

The Schmid & Anderson Grain Co. of Springfield, Minn., lost its Vesta, Minn., elevator by fire April 15. It contained 3,000 bushels of grain. The loss was \$10,000, and the insurance on plant, \$2,500.

The Gronna, N. D., elevator owned by the National Co., burned to the ground April 5. It is thought the fire may have started from a hotbox in the cupola. Three box cars were also destroyed.

The Curlew Elevator and Lumber Co.'s elevator and sheds at Glen Ullin, N. D., were destroyed by fire, April 21, caused by a spark from a locomotive. The loss was large, but is fully covered by insurance.

The Dawson (Ill.) elevator, owned by J. L. Smith of Springfield, Ill., was totally destroyed by fire May 1. The loss is estimated at \$15,000. Cause of fire unknown. Mr. Smith expects to rebuild the elevator.

G. T. Crow's elevator at Prairie Siding, Ont., burned down April 18. The origin of the fire is thought to have been from a railway train. The elevator contained \$1,700 worth of grain, and the insurance carried was heavy.

Slight damage was done by fire to Barker's elevator at Denton, Neb., April 6. Sparks from an engine caused the trouble, but the promptness of the fire department prevented much loss, only a small hole being burned in the roof.

The Tanton & Todd Elevator at Grand Harbor, N. D., one of the oldest buildings in the town, was totally destroyed by fire April 11. The fire was doubtless eaused by sparks from a train, as it started shortly after the train had passed.

The Hughes Elevator at Brooklyn, Ind., was totally destroyed, with its contents, on May 5. It is believed that the fire was of incendiary origin. No estimate of the loss was given. C. H. Hubbard of Martinsville, Ind., was interested in the elevator.

The plant of the Mercantile Grain Co. at Houston, Texas, was severely injured by fire, April 26, in which one fireman, Barney Moffatt, lost his life by being buried under hundreds of bags of grain as an upper floor fell in. The building and machinery were valued at \$15,000, and the feed-

stuffs at \$2,000. A total insurance of \$5,000 was carried. The bullding and machinery are not a total loss, but the stock is valueless.

Bingham Bros.' elevator at Tracy, Minn., was destroyed by fire, supposed to have started from sparks from an engine, on April 13. The elevator contained 3,000 bushels of oats, besides other grain. Loss, \$6,000; insurance, \$5,000. It will not be rebuilt.

R. F. Overall & Co., wholesale dealers in hay, cotton, feedstuffs and seeds, Murfreesboro, Tenn., lost a large warehouse by fire April 29. The loss on the building was \$6,500, and on the stock about \$10,000, with \$2,000 insurance on building, and \$4,000 on stock.

The Midland Elevator Co.'s elevator at Marysville, Kan., was badly damaged by fire on April 28. Manager Fred Coekerill had a lantern in one of the bins, and it exploded, burning him severely and injuring the building and grain to the extent of \$1.000; partly insured.

The office and engine room of Swearingen & Walker at Pauline, Ill., were consumed by fire April 21, and only through hard effort was their elevator saved, as it caught fire three or four times. Rebuilding will begin at once. The origin of the fire is unknown.

Elmer E. Cole's large elevator and grist mill at Billeriea Centre. Mass., were devoured by fire April 23. The loss is estimated at \$30,000, an unusually large stock of grain being in the elevator at the time. The fire is believed to have been eaused by a spark from an engine.

The big barns of the North Dakota Land and Grain Co. at Rugby, N. D., were burned down April 13, entailing a loss of \$20,000, with insurance amounting to only \$4,000. Thirty-three horses, two cows, 42 harnesses, 1,000 bushels of oats, 10 binders and other machinery were destroyed.

J. Neils, manager of the local elevator at Sauk Rapids, Minn., met with a painful accident recently. While putting a spout into place on the machine for grinding feed, it caught in the belt and drew his hand into the machinery; he jerked it out, however, in time to keep it from being severed entirely.

The plant of the E. L. Phelps Elevator Co. at Minneapolis, Minn.. suffered a loss of about \$40,000 on the night of April 20. The value of the stock was placed at \$15,000, consisting of 6,000 bushels of corn. 5,000 bushels of oats, five tons of shorts and 10 tons of hay. The elevator, office buildings and adjoining sheds were estimated at about \$20,500. Not more than half the value of the property was covered by insurance.

At Toronto, Ont., the following grain companies sustained losses by fire on April 21: Grand Trunk Elevator, containing 20,000 bushels of grain, loss \$50,000, insured for \$34,000; L. Coffee & Co., loss \$2,500, insurance \$2,500; Canadian Grain Co., loss \$4,000, insurance \$4,000; William Hannah & Co., loss \$5,000, insurance \$900; Stark Bros., loss 1,300 bushels of oats, insurance, \$900; A. Butler, loss 3,738 bushels barley, insurance \$3,000. Cause of fire unknown.

The H-C Grain Co.'s elevator at Burrton, Kan., was totally destroyed by fire in April. This concern had been doing business only a few months. The elevator contained 6,000 bushels of corn, 1,000 bushels of wheat and 900 sacks of alfalfa meal, all of which, except a few sacks of the latter, was destroyed. The structure, grain and machinery were valued at \$10,000, and the insurance amounted to \$7,000. The cause of the fire is not known, though there is a belief that it was the work of an incendiary.

The region around Huron, S. D., was swept by most disastrons prairie fires April 14. Broadland suffered the most from the flames, among the losses at that place being the Atlas Elevator, containing several thousand bushels of grain; loss estimated at \$20,000. The Van Dusen Elevator Co. suffered a loss of \$8,000. Thousands of tons of grain and hay were destroyed in every direction. The foolish practice of burning straw stacks is blamed for this most destructive sweep of fire in the recent history of the state.

The American Agriculturalist reported, on May 5, the outlook for the new wheat erop generally most encouraging, and dwelt upon the comparative absence of insect damage to winter wheat. In some states wheat had hardly held its own, but generally April was favorably for growth, and marked improvement was noted in the Ohio Valley. The average condition of the crop, as reported by correspondents May 1, was 90.9, which is a trifle better than the April condition, and may be compared with only 76.1 on May 1, 1907, and a ten-year average of 86. Spring wheat seeda generous acreage in sight.

## PERSONAL

- J. A. Wagner now has charge of the elevator at Leverett, Iowa.
- D. McPhee is the Sleepy Eye Milling Co.'s new grain buyer at Cobden, Minn.
- T. Nelson, agent of the Homestead Elevator Co. at Callaway, Minn., has resigned.
- Mr. Fleming of Iowa is now manager of the Farmers' Elevator Co. at Ethan, S. D.
- O. J. Hardin has been appointed grain buyer for the Medford Mill at Gibbon, Okla.
- P. G. Olsen of Underwood, Minn., has gone to Blanchard, N. D., to run an elevator there.
- H. E. Regnier, formerly a grain buyer at Marshall, Minn., has moved to Garvin, that state.

John Hanson has charge of the elevator at Moselle, N. D., owned by the Atlantic Elevator Co.

- W. H. Annis has bought a half interest in a Jackson, Minn., elevator and will have full charge of it.
- John E. Mosher, grain merchant of Roberts, Ill., has been quite seriously ill with whooping eough.

Harry Olin of Crary, N. D., has been appointed agent of the Minncapolis & Northern Elevator of that place.

O. J. Torbenson will remove from Fessenden, N. D., to Plaza, N. D., to take charge of the elevator, June 1.

Emery Sclls has been elected manager of the elevator and eoal business of the Farmers' Elevator Co. of Humboldt, Iowa.

Homer Humphrey of Lebanon, Mo., has taken the position of manager of the People's Elevator Co. business at Rich Hill, Mo.

H. F. Goode, formerly of Forest River, N. D., now has charge of the Osborne-MeMillan Elevator Co.'s business at South Haven, Minn.

Arthur Reetz was the successful one among seven applicants for the position of manager of the Farmers' Elevator at Armour, S. D.

- C. B. Hupen, formerly of Ambrose, N. D., has been appointed manager of the Northern Elevator at Adams, N. D., where he will make his home.
- J. F. Murphy has resigned as manager of the St. Mary, Neb., elevator, and W. W. Kirkpatrick, a well known farmer in that locality, takes his place.
- D. A. Aitkin, recently of Britton, S. D., has removed to Walt Hill, Neb. He has bought a line of elevators along the Burlington Railroad in that section.

The new manager of the Trans-Mississippi Elevator at Bristow, Neb., is Gilbert Nygren. The former manager, J. F. Larson, resigned to take up farming.

- J. T. Savidge has resigned as manager of the Farmer City Grain Co. at Bloomington, Ill., and is sueeeeded by T. A. Jordan of Cliuton, Sibley and Gibson City.
- R. R. Corry, agent for the Dakota & St. Anthony Elevator Co. at Omemee, N. D., has been transferred to White Earth, S. D., in a similar eapacity for the company.

Manager W. M. Huntsinpiller, of the Atlas Elevator Co.. Oakes, N. D., which has elosed for the summer, is giving his attention for the present to his candidacy for eounty auditor.

Clarence A. Croel of Collins, Mieh., is the new general manager of the Independent Elevator Co. at Ithaca, Mieh. He has purchased some new maehinery to be installed in the plant.

James T. Claggett has been appointed to take elarge of the Andrews & Gage Elevator Co.'s elevator at Berwick, N. D. He has had charge of this company's elevator at Oberon, N. D.

J. II. McGillivray, who is engaged in the grain business at Duluth, Minn., still desires to keep his seat in the legislature as a Republican representative. He has been in the legislature four terms.

Mr. Bertrend, in eharge of the Monarch Elevator at Swanville, Minn., for the last three years, has been transferred to Stewart, Minn., and Mr. Kreuger of Brainerd, same state, appointed to take his place.

J. K. Smith, president of the Washington Grain and Milling Co., Spokanc, Wash.; M. J. O'Neill, of the O'Neill Grain Co., Spokane, and J. D. Armstrong, manager of the Sperry Mills Co., Tacoma, Wash., together with their host, C. A. Peplow, manager of the Hammond Milling Co., were all more or less injured, though none fatally, in an

automobile accident in Scattle, Wash., April 22. The machine plunged down 25 feet from a trestle, turning over in its descent, and landed the occupants in soft mud, which, doubtless, was all that saved their lives.

S. M. Rector has removed from Bluffton, Minn., to Deer Creek, Minn., where he will have charge of the Andrews & Gage Elevator. R. M. Stundebeek is expected to have charge of the company's elevator at Bluffton in Mr. Rector's place.

James G. Martin, Manitowoc, Wis., former president of the Northern Grain Co., has resigned and is succeeded by R. L. McCormiek of Tacoma, Wash. Charles Esplin was elected secretary and treasurer of the company and is also general manager.

James H. Smith and family have left Milwaukee, Wis., for Dayton, Ohio, which they will make their home. Mr. Smith has been identified with the grain trade of Milwaukee and the Northwest for fifty years and was a member of the firm of L. F. Hodges & Co. for a quarter of a century.

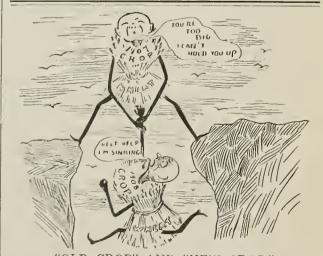
#### GRAIN DEALER'S FUNCTION.

The important function of the grain merchant has probably but seldom dawned on either the producer or the consumer. He has been pictured by the producer as a parasite living on the labors of others; and we can conceive the consumer believing that he would have to pay less if there were no commission or middlemen's profit. Little wonder then that in the Dark Ages the grain merchant was the object of the hatred and indignation of both classes. With an enlightened age it has been fully demonstrated that to the consumer the grain merchant is a person of the highest importance in saving them in years of scarcity from extravagant use of grain by advancing prices, while gathering together supplies intended for consumption after the dearth has become apparent.

Never in the world's existence has a dearth arisen from any combination among dealers. Failure of crop, or war, or some other extraordinary incident, has oceasioned all the real searcities; and it has been found that famine has arisen from no other cause than the violence of governments attempting by improper means to remedy the inconveniences of short supply. That being so, only unrestrained freedom is a preventive for the miseries of a famine so as to mitigate the inconveniences of a dearth. Bread is the staff of life, and no industry deserves more fully the protection of the law than that of the grain trade, which is exposed to so much popular odium. The ancient governments of Europe time and again legislated what they thought was for the people's good and the merchant's harm, supposing that the people could procure bread cheaper if the farmers sold their wheat without the aid of a middleman. Law after law was passed for the attainment of this end, but each of them was repealed as the enlightenment of the age advanced.

The middleman, like the poor, will be always with us, not to the country's detriment, but for its advancement and protection. Trade is necessary. To facilitate that trade we must have traders. The functions of producer and consumer have been held apart through all the ages, and will continue so while cereals are grown.—Winnipeg Market Record.

The Journal of Commerce says the absorption of Indian Territory by Oklahoma augments the winter wheat area by 156,000 aeres, the total acreage sown last fall being 1,378,800 acres. Reports are generally satisfactory, condition being fine and much better than a year ago, when it was 72.



"OLD CROP" AND "NEW CROP."
Will the "Old" hold or pull up the "New?"—J.
F. Zahm & Co.

## **TRANSPORTATION**

Charters for 400,000 bushels of wheat Chicago to Buffalo were placed on April 22 at 1½c.

Transportation on Red River for Fargo, N. D., opened on April 20. Considerable wheat was waiting for the hoats.

Boston recorded its smallest shipment of grain on April 15—1,296 bushels of wheat, by the Leyland liner Winifredian.

The transpacific rate on wheat and flour, Portland or Puget Sound to Japan and China, has been cut to \$2 per ton.

Navigation on the St. Lawrence for ocean-going ships opened on May 1, with rates very low, 24c to 27c May-June to Liverpool.

The German ship Aster, 1,333 tons, has been chartered for fall loading of wheat or barley at Portland, Ore., for 28 shillings (\$6.72 per ton.) Several vessels have been chartered for fall loading, and no better than 27s 6d has been paid.

New rates Buffalo to seaboard, in effect May 1, show increases as follows: On wheat from 6 to 6½ cents per hushel; corn, 4¾ to 5½; harley, 5 to 5¼. Flaxseed remains stationary at 5½ cents and oats at 4 cents. The rate on grain for export remains unchanged.

The first grain charters of the season made in Milwaukee were for wheat by the Berger-Crittenden Co., who took three steamers at 1½ cents a bushel; two steamers at 1% cents, and bid 1¼ cents for two more cargoes, hut received no contracts at the last figure.

The port of Buffalo was not clear of ice until late in April, vesselmen as late as April 23 finding the ice jammed in the lower end of Lake Erie. It was not clear for several days, though, on April 22, the steamer Beatty, after hucking the ice for two days, gave up the attempt and ran into Port Colbourne.

Montreal surprised the Atlantic ports in April by taking ahout 3,000,000 hushels of wheat ex-lake for export. The total charge from Duluth to Montreal by the lakes and Canadian Atlantic Railroad, free on board at the latter port, on April 21 was 7 cents, while the charge from Duluth to New York, by the lakes to Buffalo and thence by rail to New York, was from 9½ to 10 cents, which gave Montreal the advantage in all circumstances of 2½ cents per bushel. The ahove figures were for cargo lots. The crux of the situation was the charge hy the Buffalo-New York railroads of 5¾ cents per bushel for transportation of grain from Buffalo to New York.

The Ohio Railroad Commission on April 17 dismissed the complaint of the Pierce Hay and Grain Company of Van Wert against the Cincinnati Northern and Pennsylvania companies. The complainant company had run a spout from its warehouse across the street to deliver grain to cars, and claimed that it was entitled to have its cars switched thereto, under the law providing that when a warehouse is contiguous to the tracks of a railroad company so that cars can be loaded and unloaded from and to the warehouse, companies shall switch cars of their own and other lines to the track. The Commission held that the company's warehouse was not contiguous to the tracks of the Cincinnati Northern within the meaning of the law.

At a conference of the traffic men of the cast and west lines at St. Louis on May 1 the following proposition for settlement of the question which had been offered by Traffic Commissioner Lincoln of the St. Louis Merchants' Exchange Traffic Bureau was supported by all the western lines and by four of the eastern lines. 1. Grain and grain products brought into St. Louis by West Side lines and disposition instructions are given for delivery to an elevator, warehouse, industry or team track in East St. Louis, for unloading, East St. Louis rate to he applied, bridge transfer to be borne by inbound line. 2. Grain and grain products brought into East St. Louis by East Side lines and disposition instructions are given for unloading at an elevator warehouse, industry, or team track in St. Louis, Mo., the St. Louis rate to be protected, bridge transfer to be borne by East Side lines. 3. Grain and grain products forwarded from elevators, warehouses, industries or team tracks in East St. Louis to western, southwestern or southern destinations. the hridge transfer to be assumed out of earnings of outbound lines. 4. Grain and grain products forwarded from elevators, warehouses, industries or team tracks in St. Louis to southern, southcastern or eastern destinations, the bridge transfer to be borne by outbound lines. After an allday discussion, which failed to bring about unanimous action, four leading eastern lines asking for further time to consider the matter, adjournment was taken to May 19.

## A MORE SECURE BILL OF LADING.

J. S. Rich, Duluth, Minn., sends to Flour and Feed another point with reference to the bill of lading that is worthy of careful consideration on the part of the trade. Frequent reports are made of fraud in some part of the country made possible by the present promiscuous handling of hills of lading. Mr. Rich's argument, which follows, giving a way out of the difficulty as follows:

"I have been thinking for some days of writing you to see if you would think it advisable to place before the public the necessity of receiving from the railway companies a more secure bill of lading for commodities shipped, on which drafts are made with hills of lading attached. You well know that 90 per cent of all the grain and grain products are shipped to terminal points, and payment is made hy drafts with bill of lading attached.

"It seems to be a necessity, for security and also for convenience, that the seller make drafts on the purchaser, for the commodity sold. These drafts are usually drawn at sight, and payment or acceptance is required on presentation, which presentation is made from a week to 10 days, and in many cases a month before the car arrives at its destination, and is realized upon.

"Now, since the purchaser of a necessity is required to advance money on a bill of lading, there should he all possible security as to the genuineness of such a hill of lading.

"There came to my knowledge recently, a case as follows: A flouring mill, that had been doing business for some years, selling their product at terminal points, made a sale of a car of hran, flour and middlings, and secured, what was purported to be, a bill of lading for the same. This bill of lading was not given by the railway agent, but was fraudulently obtained by the mill man, who signed the agent's name. The bill of lading was attached to a draft drawn on the party to whom he sold the car, and deposited in the bank with whom he was doing business, securing credit for the same, and checked out in the usual way.

"This hank, as is the custom in all such cases, sent the draft on to the terminal point for collection, and on presentation was accepted. Some days later the draft was presented for collection. In the meantime, the party who accepted the draft ascertained that the bill of lading was a fraud, and refused to pay his accepted draft, knowing that the car never had been shipped, and that the whole thing was a fraud. The bank who had paid the mill man on the fraudulent bill of lading brought suit in the district court against the party who had accepted the draft, and obtained judgment on same, collecting the amount paid the mill, together with costs.

"The Supreme Court of the state of Minnesota, in a somewhat recent decision, maintains that it makes no difference whether the initial hank had paid over the money before acceptance was given or not, the party accepting the draft was held responsible even though he had never received any compensation. Thus the responsibility rests upon the party accepting the draft.

"This being the law, it is most necessary that all precaution possible should be taken to have all bills of lading genuine. It is the custom of some mills to have their own forms of bills of lading. These blank forms are, of course, accessible to almost every one, and could be used fraudulently at almost any time.

"It seems to me that a uniform bill of lading should be used, and it also should he numbered and stamped with a seal stamp. These blank bills of lading and the seal stamp should he as carefully guarded as their cash drawer.

"The railway companies certainly have a dtuy to perform in this respect, for it is to their interest to make business transactions secure to the party who is furnishing them business in the line of transportation of commodities.

"There is no doubt but that, if the boards of trade and business men at terminals, who put their money into commodities on bills of lading, would get together and demand of the railway companies such a bill of lading, so numbered and stamped with a seal, that it could be secured without any opposition. This would eliminate almost every chance of fraud, and thus make it practically secure to the party advancing money on bills of lading. It would seem, since the initial bank is not held responsible for the genuineness of the bill of lading attached to the draft, the party advancing the money has a right to demand of the railway company a more secure bill of lading than they are getting at present."

## CROP REPORTS

The drought has been broken in California and the grain crop is assured. In some counties the yield will be much larger than last year.

Secretary Coburn of the Kansas State Board of Agriculture says the outlook for that state is for 95,000,000 to 100,000,000 bushels of wheat.

South Carolina in several counties has planted more corn than for several years past and is paying much more attention to scientific eorn farming. Oats are promising on a reduced acreage.

L. Cortelyou, one of the best posted grain men in Kansas, says he never saw grain prospects as fine as they are this year, and that in his opinion the ground was never in as perfect condition for the planting of corn.

The New York Journal of Commerce's May 5 report, covering conditions in the winter wheat states, on the basis of 1,300 replies from ten states, estimates a condition of 91.3 or about equal the government report of April.

Illinois state report makes the wheat condition 98 per cent, while the government May report made the condition only 94 and indicated a crop of 41,000,000 bushels, about the same as a year ago. Corn left on hand 58,000,000 bushels or a fifth of the last crop; oat condition 90.

Secretary E. J. Smiley of the Kansas Grain Dealers' Association, who returned the other day from a trip over the state, says that in Kingman, Cowley, Sumner and Harvey Counties every field is infested with Hessian fly. Some of the counties in western Kansas he reports entirely hare, not a blade to be seen.

The Pennsylvania report of May 5 says much crop damage was done by frost in the western and southwestern parts of the state, but little harm is reported from other sections, and the unfavorable conditions were confined to a few counties. The greater part of the week was cloudy and the precipitation was heavy.

Nebraska had a had April—dry and cold—but no material damage seems to have been done. Stands and color are good, and farm work well advanced. Practically no acreage has heen ahandoned. Owing chiefly to the need of rain the percentage condition does not promise a hetter yield than last year, when condition was 91.

Texas reports are somewhat mixed, but on the whole are favorable for small grain. There has been too much rain for the most part. Oats are in much better condition and promise more than wheat. In the northern half much corn had to be replanted—all lowland corn especially. At San Antonio on April 29 two corn stalks in full tassel were seen.

The Missouri state report, May 3, says only 62 per cent of the corn land was then plowed, and of this only 15 per cent had been planted. There has been too much rain in the southern half of the state; crop will be very late; present condition 85. The wheat condition there improved two points during April, and was 93, against 82 last May, when it declined to 80 in Junc, and the crop turned out 29,000,000 hushels. Oat condition was 90, with acreage reduced 6 per cent.

The wheat planted last fall was 31,069,000 acres, or about 1 per cent less than in 1906; hut only 2.2 per cent, or 525,000 acres, have heen reported abandoned, compared with 1,718,000 acres abandoned in 1906, consequently the acreage at harvest is now estimated at 30,560,000, against 29,600,000 in 1906, and has only been exceeded once, in 1903, when the winter wheat area was 32,500,000 acres. According to the formula of the New York Produce Exchange these returns suggest a yield of 485,600,000 hushels on the old method, or 452,000,000 bushels on the new method, the former being used for comparisons. The previous record crop was 493,000,000 bushels in 1906.

There is little doubt that the fly is at work in parts of Kansas. Sumner, one of the great wheat counties, is in bad shape. A correspondent of the "Now mark my words, be-Kansas Farmer says: fore harvest you will hear a wail from all over the great state of Kansas, the like of which the green bug was not a circumstance. I never in all my life saw wheat damaged in the fall as badly with the Hessian fly as the wheat was in this part of the state. Plenty of fields were practically ruined last fall, the weather being exactly suited for their propagation. We could find plenty of them in the maggot stage in December. know Kansas has a large area devoted to wheat, but I cannot understand how we ean have so many Hessian flies and the rest of the state be exempt. I hope it is so, but my prediction is

Kansas will harvest the smallest crop of wheat she has for several years."

Kentucky May report makes the wheat condition better than the government report, showing 6 per cent better than month ago and 10 per cent above a year ago, when it was 89. The prospective corn aereage this year is 102 per cent, but only 17 per cent has been planted, against 30 year ago. Oat condition 86, against 83 year ago; aereage seeded to May 1 only 75 per cent.

The Ohio May crop report, May 5, shows a decided improvement in the wheat condition during April. It is now 92, against 85 last month and 74 a year ago, when it declined 13 points from April. The crop last year turned ont about 32,000,000 bushels, against 40,000,000 in 1906, when the crop was the largest in late years, and due to a yield per acre of 21 bushels. The acreage sown last fall was a trifle smaller, but very little was winter-killed. Wheat yield, per acre, promises to be larger than last year, but the acreage is smaller, and the crop may not exceed last year's. No damage by insects. Oat acreage is only 93 per cent of last year's, or 1,335,000 acres. The weather was unfavorable to seeding. Rye condition, 91, against 86 a year ago. Barley—Spring, 83; winter, 85. Clover area sown, compared with last year, 82 per cent.

From very full and complete reports to the Daily Market Record from its correspondents throughout Minnesota and the Dakotas it seems that present prospects are for a somewhat increased acreage of spring wheat, corn, oats and barley, with some falling off in the acreage to durum wheat, rye and flax. The decrease in the acreage to durum is quite considerable and is not fully made up by the increased acreage of spring wheat, giving the Northwest, as a whole, a wheat acreage this year slightly under that of a year ago. North Dakota shows an increase of 4.5 per cent over last year in the total wheat acreage, but this is a little more than offset by a deereased acreage in Minnesota. South Dakota shows 1 per cent increase. Spring seeding is well advanced and prospects were seldom, if ever, more encouraging at this season of the year than they are at present. In Minnesota and South Dakota wheat and rye are practically sceded and in many places are up and doing well. Seeding of oats, barley and flax is not quite as far advanced, but a few days more will see the work practically completed. North Dakota is not as far along as either Minnesota or South Dakota, but is far ahead of late years in seeding of all grains. About 75 per cent of the wheat is already in and work is steadily progressing under fairly favorable circumstances.-Minneapolis, May 8.

The government report of May 8 placed the total area of winter wheat standing ou May 1 to be harvested at 29,751,000 acres, which is 4.2 per eent, or 1,318,000 acres less than the area reported as sown last fall, and 5.8 per cent, or 1,619,000 acres more than the area of winter wheat harvested last year. The average condition of the growing winter wheat on May 1 was 89 per cent of a normal, as compared with 91.3 per cent on April 1 and 82.9 per cent on May 1, 1907. In rye the average condition of the crop was 90.3 per cent of a normal, as compared with 89.1 April 1 and 88 per cent on May 1, 1907. Of the total acreage of the spring plowing contemplated 66.6 per cent is reported as actually completed up to May 1, as compared with 71.5 per cent at the corresponding date late year. Of spring planting 54.7 per cent was completed on May 1, against 47 per cent on May 1, 1907. The following table shows for the principal winter wheat states the per eent of the area sown last fall, which has been abandoned, the area remaining on May 1 and the condition of winter wheat on the dates indicated:

		Condition,		
	Per Cent		May 1,	
States.	Abandoned.	Remaining.		Av.
Kansas	2.5	5.782,000	81	87
Indiana		2,721,000	94	78
Illinois		2,321,000	94	85
Nebraska	, 4.0	2,265,000	87	93
Missouri		2,226,000	92	88
Ohio		2,083,000	91	80
Pennsylvania		1,590,000	88	SS
California	,.,35.0	987,000	60	82
Oklahoma		1,347,000	92	86
Texas		924,000	88	77
Michigan		\$74,000	90	78
Tennessee	2.5	819,000	95	86
Kentucky		758,000	96	88
Maryland		765,000	88	90
Virginia		651,000	95	S9
North Carolina.		565,000	91	87
Washington		449,000	97	92
New York		113,000	11	87
Oregon		388,000	97	96
West Virginia.		361,000	91	SG
All other		1,424,000	90	90
United States		29,751,000	89	5., 9
ml to live to	a viold in		hughola	The

The indicated yield is 460,680,000 bushels. The average condition of hay lands on May 1 was 93.5 per cent of a normal, as compared with 83.6 on May 1, 1907, and 89.5, the mean of the averages on May 1 of the last ten years.

## THE CO-OPERATIVES

The Farmers' Elevator Co. of Kanawby, Iowa, has paid an 8 per cent dividend on business of 1907 crop.

Members of the Minnesota Farmers' Elevator Association will hold a district meeting at Zumbrota on May 23.

The Ellis Farmers' Elevator Co., Ellis, Neb., earned \$1,100 in 1907 on a business of 45,000 bushels of corn, 3,000 wheat and 3,500 of oats.

The Farmers' Cereal Co. at Sloan, Ia., earned 27 per cent last year, paying 10 per cent in dividends and putting 17 per cent into surplus.

No dividend was declared by the Farmers' Elevator Co, at Strawn, Ill., this year, because of the crop conditions this past season and the "car shortage,"

The matter of the ownership and operation by the government of grain elevators at all shipping points in Saskatchewan is again before the provincial parliament.

The Farmers' Incorporated Co-operative Society at Nashua, Iowa, has decided to go out of business. No financial losses are reported, but the venture was not satisfactory to the members.

The Pawnec County Grain and Supply Co. of Larned, Kan., declared a 50 per cent dividend on the business of 1907 crop. The elevator handled 357,277 bushels of wheat and \$11,221 worth of coal.

The Ashton, Iowa, Farmers' Elevator Co. held its annual meeting recently. The official reports showed that the number of stockholders is 106. During the last eight months 184,000 bushels of grain were handled.

At the annual meeting of the Independent Elevator Association, the Farmers' Society of Equity and the Farmers' Co-operative Educational Association, held at Hutchinson, Kan., on April 16, a merger was formed of the three organizations.

The Farmers' Elevator Co. of St. Peter, Minn., has been granted leave to dissolve the corporation. The company sold its elevator some years ago, and the co-partnership is dissolved that affairs may be wound up. S. H. Pettis of St. Peter has heen appointed receiver.

The Grayson County, Ky., Branch of the American Society of Equity, at its quarterly meeting at Leitchfield, on April 18, decided to undertake the pledging and pooling of wool and grain, in addition to that of tobacco. Committees were appointed to begin an active canvass.

The Farmers' Elevator Co. of Blue Springs, Neb., at its quarterly meeting of stockholders held April 11, voted to increase the capital stock from \$10,000 to \$25,000, and also amended its articles of incorporation increasing the indebtedness which the company might incur from \$2,500 to \$6,000. Several new members were added to the company.

The Railway and Warehouse Commission has asked Attorney-General Young for an opinion covering its right to sell valuable lake front property owned by it at Duluth. The property was acquired in 1893 under a state law authorizing the construction of a state elevator. This law was later declared unconstitutional, and the land purchased has been lying idle ever since. The Commission now wants to either sell or lease it and the right to do so is in question.

The great "basic fact" in corn, overshadowing all other considerations for an extended view of the situation, is the denuded condition of supplies at all points. At all producing and consuming points corn is scarce. Deliveries on May contracts have failed to embarrass the longs and will readily be marketed. The heavy rains have delayed planting. The new acreage, consequently, may not be so large as anticipated.—E. W. Wagner.

A record in grain inspection was established by the Minneapolis corps of inspectors on April 30 when 497 cars of grain were inspected out of the Minneapolis elevators. Much of the grain went to mills, but the larger quantity was for shipment. The previous high mark for one day's inspection was 422 cars, which is beaten by just 75 cars. Practically three-fourths of the inspection covered wheat, the total quantity being 372 cars of wheat, to 125 cars of all other grains.

Consistency in grain trading should not always be expected. The leading champion of May wheat at 17c over the price for September is selling corn, hefore it is planted, for May, 1909, at 20 cents below the price for May, 1908. The concern supposed to be heaviest holders of May corn

are enormous sellers for July at around 9 cents discount, though such a "hedge" may truly offer them ultimately the best outlet for their surplus corn carried over from May.—Pope & Eckhardt Co., May 7.

#### WHEAT ELEVATORS IN INDIA.

Hitherto all our efforts have been devoted to raising the capacity of the railways. It has progressed so far that the North-Western, the prineipal wheat-carrying line, ean now pour produce into Karachi much faster than the merchants can handle it. The important new works now in progress in Karachi contemplate no radical de-parture from the present practice. Wheat is to be brought from the producing districts in bags, and cleaned or prepared for shipment on the outskirts of the docks. In America the railways found that between the two systems the advantage lay entirely with the elevator, and they promoted the system for that reason. Before we proceed much further with the costly distributing works now in contemplation, we should decide finally whether the elevator system is adapted to Indian condition, lest we find ourselves saddled with expensive facilities still unsuited to the traffic they are designed to accommodate, says the Times of India of Bombay,

At the outset we are met with a serious obstacle. An essential part of the elevator system is that wheat should be sold by grade. This system is wide as the poles from that pursued in India. In India the wheat assembled at the ports of shipment comes from a multitude of small growers and arrives unclassified and ungraded. It is cleaned, blended and generally fixed into a grade snited for export. The extent to which this "doctoring" goes on may be illustrated by the case of a particular variety of seeds which is shipped from Bombay in large quantities. The seeds are grown in a district well within the geographical area of Calcutta; but Calcutta cannot sell a ton of them. The explanation is that Bombay can buy locally seeds of a similar variety, hut of a higher quality, and by mixing, a blend is produced acceptable to the European consumer. system differing in every essential from that under which American trade is done be revolutionized so as to adapt it to elevators? This is a question which can only be answered by wheat shippers; the Times will only say that it is sceptical of dogmatic pronouncements on Indian conservatism, because everyone was assured that clean Indian wheat could not he marketed, yet now all our trade is done on a "clean" basis.

#### ARGENTINA WHEAT YIELDS.

It seems to be a hard matter to get much accurate data covering the Argentina wheat production. In a general way we know whether the crop is large, small or moderate. There is no question but that it is of record proportions this season. Recently there has come to hand reports which would put the average yield for this year at 18 bushels per acre. If this should prove true then the recent harvest is indeed a huge one and has been equaled but once in the agricultural history of that country. We have rather leaned to the belief that such figures were an exaggeration, but what has been done once may, of course, happen again.

At any rate such a yield per acre is of rare occurrence in Argentina. Some time ago the government issued a pamphlet showing the average yields of the different producing countries for a series of years. Covering Argentina this report showed that in 1894 the South American crop produced 18 bushels to the acre. This was an exception and has not been approached since. Argentina is not noted for liberal per acre production. The average over a series of years will not run above 11 bushels. The country is, however, noted for irregular returns. In 1897 the average was down as low as 5.1 hushels per acre.

This season may have proven one of those rare exceptional years. At any rate it is a good thing for the wheat consuming world that the country to the south was fortunate enough to gather a bountiful harvest. Had anything gone wrong with the production in the southern hemisphere the world would have come the nearest to a wheat famine in many generations. With the almost practicable elimination of all exporting countries from the international market the last half of the crop season save the South American country, Europe has been able to meet this deficiency by the heavy movement from here. Exports have been heavy to meet this extraordinary demand and it may be that the first half of the export season will see the pressing surplus disposed of. If the crop has been as large as the most optimistic reports, however, the Argentina wheat erop may be a heavy factor the whole season.-Minneapolis Market Record.

## BARLEY AND MALT

Prof. H. L. Bolley, of the Department of Agriculture, at the Agricultural College, Fargo, N. D., found, by many tests of seed barley from all over the state, that the frosts last fall killed much of the seed barley, as that grain freezes much easier than other grains before maturity.

Minneapolis has been rapidly coming to the fore, within the last few years, as a barley market. During 1907 Minnesota, North Dakota and South Dakota produced 62,000,000 bushels of barley; the whole Uuited States, during the same time, produced but 153,000,000 bushels, from which can readily be seen the importance of the

The American Malt Corporation (holding company) hopes to be in a position to begin the payment of dividends on its preferred stock before the close of the year, the earnings of the American Malting Co., the operating concern, for the current fiscal year being in marked contrast to those of last year. The year ended August 31, 1907, was a disastrous one for the operating concern, the net loss for the year amounting to \$200,932. The reason for this loss was given as bad judgment displayed in the purchase of barley and the selling of malt.

H. D. McCord has let a contract to L. O. Hickok & Son of Minneapolis for the construction of a barley elevator in that city, to hold 90,000 bushels. The plant will comprise a working house and six steel reinforced concrete tanks, with intermediate storage space. It will be one of the most modern barley handling plants in the country. The site has railroad trackage on both sides and the elevator will have trackage about it for forty cars and a daily handling capacity for fifty to sixty cars. Mr. McCord is aeting for the Merchants' Elevator Co., a newly formed corporation, of which he is president and treasurer, and A. H. McIntyre of Minneapolis, secretary. The vicepresident is M. Rothschild of D. Rothschild Grain Co., Davenport, Iowa, one of the largest firms in the Western barley trade, which, through the new facilities will gain a footing in the Minneapolis barley market, which is increasing so in importance as to make it a necessity.

Consul Ernest L. Harris advises the Department of Commerce and Labor that the embargo recently placed by the Turkish government upon the export of barley from the port of Smyrna is still in force, to which he adds: "One of the largest shipping firms in this city, as well as some minor ones, are having considerable trouble in attempting to carry out orders placed for their customers before this prohibition went into effect. A period of six weeks was given them to meet their engagements, but they state that this limit has not been sufficient. There is a great shortage this season all over the country, and there is as great an opportunity for the sale of barley in these parts as there is for wheat. Barley is one of the most important eereals in Asia Minor. This is not only true to-day, but it has been so as far back as the history of this country may be traced. In districts where rice is not to be obtained it is even used as a substitute for the natural Turkish dish of "pilaf." The neighborhood of Amasia and the plains of Sivas are celebrated regions for the production of barley. 50,000 tons annually are exported from the port of Samsun."

#### PRIZES FOR BARLEY.

In order to stimulate interest in grain growing in that neighborhood, the Manitowoc (Wis.) Industrial Association offers a variety of silver eups as prizes for the best exhibits in eertain specified grades of grain shown at the annual fair, to be held from August 25 to 28, inclusive. Among the cups so offered are two for the best specimens of Oderbrucker barley grown and exhibited. These are offered by the Wm. Rahr Sons Co. for the best showing as to quality of Oderbrucker barley raised within the limits of Manitowoc County, and by the Anheuser-Busch Brewing Association for the best exhibit of Oderbrucker barley grown outside of Manitowoc County, but raised in the state of Wisconsin and exhibited at the Manitowoc County Fair.

It is estimated that in 1908 nearly one-half of the barley acreage of Wisconsin will be of the improved Oderbrucker variety, which is rapidly replacing the old mixed varieties of barley; and this increase will continue, it is believed, because it has been demonstrated that it will yield from five to ten bushels to the acre more than other varieties and because it is less liable either to rust or to smut.

The Anheuser-Busch Brewing Association offers

a cup for the best barley exhibit of the common variety also and one cup for the best second quality, same variety.

#### THE BARLEY CROP.

From one-fourth to one-third of the barley produced in the United States for the past thirtyfive or forty years has been grown on the Pacific Coast. Of the crop of 1907, amounting to 153,597, 000 bushels, California, Oregon, Washington and Idaho produced 41,481,000 bushels, or 27 per cent; and in 1906 also the crop of these four states was 27 per cent of the total. In 1870 New York produced 6,616,000 bushels, while in 1907 the crop was only 1,975,000 bushels. The group of five states, including Minnesota and the four states bordering on it, produced 95,035,000 bushels of barley in 1907, or 62 per cent of the total; in 1870 the crop of Minnesota, Wisconsin and Iowa was only 3,638,000 bushels, and all the territories together—separate returns from Dakota in that year are not available—produced 328,000 bushels. The barley crop of the five states just mentioned amounted in 1907 to nearly twenty-four times the crop of 1870.

The barley of the Pacific Coast is grown largely for export, while all but a small part of the crop grown east of the Rocky Mountains is usually consumed in the United States.

For the first seven months of the fiscal year

## LATE PATENTS

Issued on April 7, 1908.

Grain-Door for Cars.—John Edman, Minneapolis, Minn. Filed August 26, 1907. No. 884,011.

Pneumatic Conveyer.—Clarence L. Groves, Hartford City, Ind. Filed April 30, 1907. No. 884,016.

#### Issued on April 14, 1908.

Machine for Cleaning and Grading Grain and Seed.—James H. Hoover, Decatur, Ill. Filed October 23, 1905. No. 884,660.

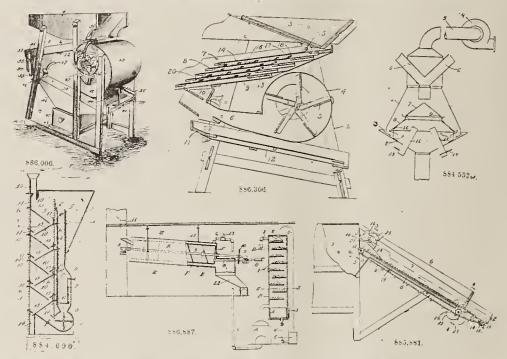
Grain Cleaner.—Charles A. Wright, Chicago, Ill. Filed July 16, 1906. No. 884,551.

Grain Cleaner.—Charles A. Wright, Chicago, Ill. Filed May 4, 1907. No. 884,552. See cut.

Grain Drier.—William Wilson, Seattle, Wash., assignor of one-half to Thomas G. H. Grant, Wenatchee, Wash. Filed December 24, 1907. No. 884,696. See cut.

#### Issued on April 21, 1908.

Corn Grader.—Alfred Struble, Carthage, Ill. Filed April 15, 1907. No. 885,395.



1908 exports of barley from the United States amounted to 3,380,000 bushels, of which 3,363,000 bushels were shipped from the Pacific Coast.—Crop Reporter.

## IMPORTS AND EXPORTS OF BARLEY AND MALT.

BARLEY.

lmports—	Bushels.	Value.			
March, 1907	6	\$ 12			
March, 1908	1,147	855			
Nine mos. ending March, 1907.		12,809			
Nine mos, ending March, 1908.	197,464	141,650			
Exports					
March, 1907	424,587	251,225			
March, 1908		98,558			
Nine mos. ending March, 1907.		4,184,083			
Nine mos. ending March, 1908.		2,961,700			
BARLEY MALT.					

 Exports—
 Bushels.
 Value.

 March, 1907
 25,879
 \$ 16,609

 March, 1908
 10,160
 10,364

 Nine mos. ending March, 1907
 275,431
 183,412

 Nine mos, ending March, 1908
 184,254
 160,677

The British ship Celticburn has been chartered at Portland, Ore., to carry wheat to Europe in bulk. This is the first contract of the kind ever made in Portland.

The steamship Columbian, on April 24, took out of Boston 32,000 bushels of wheat to London at the lowest rate ever quoted, being eight bushels for a penny, or \(^1\)/4c a bushel. It was taken in lieu of ballast.

Northwest as a barley producing section. California is still the leading barley state, but Minnesota is giving it a hard run. In 1907 California produced 30,000,000 bushels, and Minnesota 26,000,000. North Dakota and South Dakota are also coming to the front in barley raising to such an extent that it is predicted they will rank first and second, in the next five years, with California third and the positions of Minnesota and Wisconsin indeterminate.

Corn Sheller Machine.—Arthur D. Cone and Arvine C. Cone, Ansley, Neb. Filed July 31, 1907. No. 885,665.

#### Issued on April 28, 1908.

Feed Regulator for Corn Shellers.—William J. Steckel, Joliet, Ill., assignor to Joliet Manufacturing Co., Joliet, Ill. Filed May 28, 1906. No. 885, 881. See cut.

Grain Door.—Robert D. Stryker, Huron, Ohio. Filed September 30, 1907. No. 886,090.

Grain Screen.—George H. Rechtenbach, Bridgewater, Iowa. Filed April 13, 1907. No. 886,247.

Grain Separator.—Robert J. Owens, Minneapolis, Minn. Filed June 18, 1906. No. 886,306. See eut.

Seed Separator.—Frank G. Lyman, Wapakoneta, Ohio, assignor of one-half to John E. Gunther, Wapakoneta, Ohio. Filed July 19, 1907. No. 806,006. See cut.

### Issued on May 5, 1908.

Grain Door for Railway Cars.—John C. Marxen and John H. Woodward, Avoca, lowa. Filed June 8, 1907. No. 886,529.

Apparatus for Treating Grain.—Claude D. Stevens, Chicago, Ill. Filed April 29, 1907. No. 886, 887. Sec cut.

Automatic Controller for Wagon Dumps.—Louis J. McMillin, Indiauapolis, Ind. Filed April 25, 1997. No. 886,536.

The grain handlers and exporters at Portland, Ore., who have been at outs on the matter of wages, have come to an agreement, the exporters accepting the proposal made by the grain handlers for 35 cents an hour for straight time and 50 cents for overtime, nine hours to constitute a day's work.

Iowa farmers think they have discovered a few facts about seed corn. "They say" that of seed corn taken from cribs, however carefully selected, but little would grow, while of that taken from the shock, where the corn was cut for fodder, most would grow. Especially is this true where the corn was cut early. Q. E. D.?

## **OBITUARY**

A. H. Green, a grain shipper at Monroe City Mo., died on April 30 of heart disease while at work in his office.

Fred Vanderberg, former president of the Blackwell Grain and Elevator Co., died near Wellington, Kan., April 21, of tuberculosis. He was 34 years old and is survived by a wife and three children.

Louis Redd, a grain and provision broker of Columbus, Ga., jumped from a third-story window of a hotel on April 15, dying half an hour later. Ill-health was the cause of his act. He was 38 years of age.

Joseph O. Foard, a charter member of the Corn and Flour Exchange, died on April 29, at his home in Baltimore, Md., at the ripe age of 91 years. He was one of the early vice-presidents of the Exchange. He retired from active life in 1875.

Herbert W. Scott, one of the leading business men of Hastings, Neb., died April 3, after several months' illness from paralysis. For a number of years he was extensively engaged in the grain business with his father, A. G. Scott, the two owning a chain of elevators. Mr. Scott was born in Sheffield, Ill., in 1859.

George W. Morton, a grain merchant and member of the Merchants Exchange, died May 1, at St. Louis, Mo. Mr. Morton was 49 years old. He had been suffering from an acute attack of heart trouble for two weeks. He leaves a brother, three sisters and a mother. He was buried at Montezuma, Ill., the family home.

John Dunnett, a prominent grain man of Minneapolis and St. Paul and one of the best known members of the Minneapolis Chamber of Commerce, died April 26, at his apartments in the Plaza Hotel, Minneapolis, after a three hours' struggle with apoplexy. He began business as an employe of A. J. Sawyer, a prominent grain dealer of the Northwest, and upon Mr. Sawyer's death continued the business as John Dunnett & Co. More recently he became interested in lumbering in Wisconsin. He is survived by a widow, but had no children.

John Paull, a prominent resident of Taunton, Mass.. and connected with the grain business for a half century, died suddenly of heart trouble April 11, while attending to business. Mr. Paull was one of the 'Forty-niners who went to California during the gold excitement and after his return from the Coast entered the grain business of which he was the head at his death. Although he was over 80 years of age he took an active part in the conduct of his business and was as keen and acute mentally as a young man. A widow and a son and daughter survive him, also one sister.

#### CORN IN THE AZORES.

Consul John F. Jewell of St. Michaels reports as follows on the corn shortage in the Azores, indicating that it may be necessary to make importations:

"On account of the great increase in the price of coin, and in view of avoiding a possible crisis in the supply of this article of food, owing to its present scarcity and the probable shortness of this year's crop, the civil governor has issued a decree prohibiting the exportation of corn from St. Michaels. It is unofficially reported that the same conditions prevail in the other Azorian islands as at this place.

"Corn is grown in abundance in ordinary years, and in addition to being the principal article of food of the rural and laboring classes, is largely exported to Lisbon. An unusually large quantity was shipped the past year. The present price in St. Michaels is equivalent to \$1.25 to \$1.35 per busbel. It is feared that the price will increase and suffering result among the poorer classes as a consequence. There is enough for present needs if economy is practiced; but during the past three months the rainfall has been light and the corn planted is very backward."

Michigan state report, May 7, shows that only 3 per cent of wheat acreage sown was winter killed or destroyed by fly. Oat acreage seeded to date 95 per cent of the average for past five years.

The corn acreage in Oklahoma this year will be bigger than ever before. In 1906 there were 4,000,000 acres planted in corn. Last year about the same was planted, with a yield of 133,000,000 bushels. The acreage this year will be increased over last year more than 10 per cent.

# For Sale

[Copy for notices under this head should reach us by the 12th of the month to insure insertion in the issue for that month.]

### **ELEVATORS AND MILLS**

#### FOR SALE.

Elevators in Illinois and Indiana that handle from 150,000 bushels to 300,000 bushels annually. Good locations. Prices very reasonable. Address JAMES M. MAGUIRE, Campus, Ill.

#### FOR SALE.

Twenty-thousand-bushel capacity elevator for sale. Been built 5 years. Good condition and located in a good grain territory. Address

PATTY & COPPOCK, Fletcher, Ohio.

#### FOR SALE.

Several desirable elevators situated on the C. M. & St. P. and C. G. W. Rys.; also terminal elevator K at Minneapolis. Address

SHEFFIELD MILL & ELEVATOR CO., Chamber of Commerce, Minneapolis, Minn.

#### FOR SALE.

Elevator and lucrative business. Elevator capacity, 75,000 bushels; all latest improvements, with electric power, etc.; large grain warehouse; large fireproof brick hemp house; coal and grain business. Situated in the best of the Blue Grass region, Georgetown, Scott County, Ky. Only elevator in county; annual wheat production, 400,000 bushels. Georgetown has a population of 8,000. Three railroads in our yards. For particulars address

OFFUTT & BLACKBURN, Georgetown, Ky.

#### MACHINERY

#### FOR SALE.

Feed mill and gasoliue engine.
STANDARD LUMBER CO., Winona, Minn.

#### FOR SALE.

One No. 5 Eureka Oat Clipper in good repair. THE CLEVELAND GRAIN CO., Cleveland, Ohio

#### FOR SALE.

Twenty-horsepower gas engine.

AMERICAN HARDWARE MFG. CO., Ottawa,
111.

#### ENGINES FOR SALE.

Gasoline engines for sale, 5, 7, 10 and 20 horsepower.

TEMPLE PUMP CO., 15th Place, Chicago, Ill.

#### FOR SALE.

One No. 37 Howes Oat Clipper, good as new. Address

THE ADY & CROWE MERCANTILE CO., Denver, Colo.

#### FOR SALE.

Two J. Mohr & Sons 85-horsepower boilers in good condition. Address

H. P., Box 5, care "American Elevator and Grain Trade," Chicago, III.

#### FOR SALE.

Two U.S. Moisture Testers (Greiner make with glass flasks) for gas; slightly used, but good as new, \$25 each.

HESS WARMING & VENTILATING CO., 909 Tacoma Bldg., Chicago, Ill.

#### WANTED.

A few second-hand gravity or needle machines. Must be in first-class condition. Address

G. C., Box 5, care "American Elevator and Grain Trade," Chicago, Ill.

#### MONEY IN YOUR POCKET.

If you want to change that second-hand machine into money advertise it in this department. Or if you have a grain elevator to sell or rent, or wish to buy, make your wants known through these columns.

#### FOR SALE.

Gasolino engines; one 54-horse Fairbanks-Morse; one 28, one 16, one 12, 2, 8 and 25 horsepower Sterling Charter. All sizes and prices in small sizes.

A. H. McDONALD, 38 W. Randolph St., Chicago.

#### FOR SALE.

Two No. 8 Monitor Dustless Warehouse Separators, fully equipped with all screens necessary for cleaning wheat, barley, oats and flax. These machines are as good as new and have given excellent service. We also offer one country elevator "weighing-in" scale, complete, 60,000 pounds' capacity. These last-mentioned articles would be most suitable for a country mixing house or mill. Address

GEO. C. BAGLEY ELEVATOR, CO., 54 Chamber of Commerce, Minneapolis, Minn.

#### **SCALES**

#### FOR SALE.

One almost new 500-bushel Fairbanks Hopper Scale.

THE CLEVELAND GRAIN CO., Cleveland, Ohio

#### SCALES FOR SALE.

Scales for elevators, mills, or for hay, grain or stock; new or second-hand at lowest prices. Lists free.

CHICAGO SCALE CO., 299 Jackson Boulevard, Chicago, Ill.

## SCALES AND ENGINES FOR SALE, BARGAINS.

Railroad Track Standard 100-ten, 42-foot, \$390; Fairbanks' 60-ton, 42-foot, \$290; 38-foot, \$250; 36-foot, \$260; Wagon Howe 10-ton, 22-foot, \$110; Fairbanks' 14-foot, \$95; 5-ton, 14-foot, \$55; 4-ton, \$50; Hopper Fairbanks' 200-bushel, \$75; 150-bushel, \$65; Dormant Standard, 5,000-lb., \$70; Standard, 2,500-lb., \$35; Portable, 2,500-lb., \$30; 2,000-lb., \$27; 1,500-lb., \$21; 1,000-lb., \$16; 600-lb., \$12. All refitted and guaranteed good as new. Also 8-horse-power Weber Gasoline Engine, \$275; 5-horsepower, \$170; 5-horsepower portable, on truck, \$220. All new; never operated.

THE STANDARD SCALE & SUPPLY CO., 50-52 So. Canal St., Chicago, Ill.



[Copy for notices under this head should reach us by the  $12{\rm th}$  of the month to insure insertion in the issue for that month.]

#### HALL SAFE FOR SALE.

About 5 feet high by 5 feet wide; burglar and fireproof. First-class condition. Address

SPRINGFIELD MILLING CO., Springfield

SPRINGFIELD MILLING CO., Springfield, Minn.

### MILL WANTED.

Write for our proposition to establish a home and export flour mill at the mouth of the Columbia River on the Pacific Coast.

ROOM 1180 CHAMBER OF COMMERCE, Astoria, Ore.

#### FOR RENT.

Elevator, mill, grain and feed store at Chappaqua, West Chester Co., New York. Right beside the rails and on main street of village. Capacity 14 to 17 cars. No competition nearer than two miles; 32 miles from Grand Central Station and in a growing community. Golden opportunity for the right man.

GEORGE HUNT, Chappaqua, N. Y.

#### FOR LEASE.

For term of years, an old established hay warehouse and elevator combined, in Kansas City, Kan., on Missouri Pacific R. R., with a growing trade and splendid future. Good opportunity for expanding and enlarging. Inventory March the first makes an elegant showing. Best of reasons for wanting to lease. Will require \$15,000 cash to handle. Rent reasonable. We court a personal inspection of this proposition. Write for particulars to

KANSAS, Box 4, care "American Elevator and Grain Trade," Chicago, Ill.

### **ELEVATORS WANTED**

#### WANTED.

Elevator or mill and elevator for good improved Illinois or Iowa farm. Address

IOWA, Box 1, care "American Elevator and Grain Trade," Chicago, Ill.

#### GRAIN AND SEEDS

#### FIELD SEEDS.

ALFALFA SEED, Government tested. Whipporwill Cow Peas, excellent quality and right

J. E. WING & BROS. SEED CO., Mechanicaburg, Ohio.

#### FIELD SEEDS

### WE HAVE IN STOCK TODAY:

Twenty Carloads Millet Seed.
Fifteen Carloads Kaffir Corn.
Ten Carloads Cane Seed.
Five Carloads Alfalfa Seed.
All Kansas grown and recleaned.
Ask for samples and prices.

THE BARTELDES SEED CO.

# Wood's Virginia Superior both in growth and nutritive qualities. Our Ensilage Corn. silage Corn has achieved a big reputation wherever planted.

We are headquarters for all Farm Seeds, Cow Peas, Sorghums, Millets, Crimson Clover, etc. Prices quoted on request.

Write for prices and Wood's Crop Special, giving interesting information about Farm Seeds. Mailed free on request.

T. W. WOOD & SONS,

SEEDSMEN, - - RICHMOND, VA.

## ROOFING AND SIDING.

## SYKES STEEL ROOFING GO

114 W. 19th Place, Chicago



#### MAKERS OF FIREPROOF WINDOWS

WE manufacture all gauges of corrugated iron, either painted or galvanized. We make Patent Cap Roofing, Roll Cap Roofing, "V" Crimped Roofing, Metal Ceilings, etc., etc.

We make a specialty of

## Corrugated Iron and **Metal Roofing** For Grain Elevators

And take contracts either for material alone or job completed. Write us for prices. We can save you money.

#### GRAIN RECEIVERS

### PITTSBURG

## D. G. Stewart @ Geidel

GRAIN, HAY AND FEED RYE A SPECIALTY

Office 1019 Liberty St.

Pittsburg, Pa.

Proprietors Iron City Grain Elevator. Capacity 300,000 bu.

## We Want Alfalfa Hay

Shippers of ALFALFA should communicate with us regarding prices and shipments. Pittshurgh is the best market in the world.

Liberal advances on consignments. DANIEL McCAFFREY'S SONS CO.

PITTSBURGH, PA. References: Duquesne Nat. Bank. Washington Nat. Bank

### MINNEAPOLIS



**GRAIN RECEIVERS** 

Consignments Solicited.

MILLING WHEAT A SPECIALTY

## Marfield, Tearse & Noyes

lnc.

## GRAIN COMMISSION

CONSIGNMENTS AND ORDERS FOR FUTURES SOLICITED.

Offices: Chicago, Milwaukee, Minneapolis, Duluth. Private wires: Chicago and New York.

511-514 New Chamber of Commerce, Minneapolis, Minn.

#### DETROIT

A. S. DUMONT

R. C. ROBERTS

MINN.

## Dumont, Roberts & Co. RECEIVERS GRAIN SHIPPERS

Chamber of Commerce DETROIT, MICH.

Merchants Exchange DECATUR, ILL.

Consignments Solicited.

Ask for our Bids and Quotations.

## CAUGHEY & CARRAN

DETROIT, MICH.

Grain and Seed Merchants and Commission

OUR SPECIALTY: OATS AND CLOVER SEED

We handle Beans, Barley, Rye, Corn, Wheat. Try us. Liberal advances

OFFICES: 620 to 624 Chamber of Commerce ELEVATOR and SEED HOUSE: Corner 14th and Baker Sts.

#### FREMONT

## Nye, Schneider, Fowler Co.

GRAIN DEALERS

Corn for Feeders. Milling wheat a specialty, both winter and spring. Write for samples and prices. Shipment via C. & N. W. R. R.

General Offices

- - FREMONT, NEB.

### MILWAUKEE

O. MOHR, Mgr.

## Mohr-Holstein Commission Co.

29 Chamber of Commerce

MILWAUKEE

Sample Grain a Specialty

BRANCH OFFICES AT CHICAGO, MINNEAPOLIS

**CHICAGO** 

**MINNEAPOLIS** 

J. V. LAUER & CO.

Grain Commission BARLEY A SPECIALTY

Ship us your next car Chamber of Commerce

MILWAUKEE, WIS.

## The Franke Grain Company

Receivers and Shippers of

GRAIN AND MILL-FEED

Rooms 43-44 Chamber of Commerce MILWAUKEE, WIS.

**OUR SPECIALTIES:** 

## Malting Barley Milling and Distilling Rye

FAGG & TAYLOR, Shippers MILWAUKEE, WIS.

B. G. ELLSWORTH, President
E. H. HIEMKE, Secretary

L. Bartlett & Son Co.

## GRAIN COMMISSION MERCHANTS

Room 23 Chamber of Commerce Building MILWAUKEE, WIS.

#### LOUIS ST.

## Daniel P. Byrne & Co.

Seneral Commission Merchants

SUCCESSORS TO Redmond Cleary Com. Co.

Incorporated 1887 Established 1854 Srain. Hay, Mill Food and Soods Chamber of Commerce, St. Louis, Mo.

SLACK=FULLER GRAIN

RECEIVERS AND SHIPPERS OF

-CONSIGNMENTS SOLICITED-208 Merchants' Exchange

ST. LOUIS, MO.

T. R BALLARD, Pres.
JÑO. L. MESSMORE, V.-Pres & Treas.
JNO. O. BALLARD, Secy.

ST. LOUIS MERCHANTS EXCHANGE
CHICAGO BOARD OF TRADE

BALLARD-MESSMORE GRAIN CO. GENERAL COMMISSION MERCHANTS

> GRAIN, BRAN, HAY AND FEED 520 Chamber of Commerce

Consignments Solicited

St. Louis

## GRAIN RECEIVERS

**TOLEDO** 

# C.A.KING&Cº

The Golden Rule grain and seed firm of Toledo. Try them on futures, grain, seeds and provisions, Toledo and Chicago. They give GOOD SERVICE. Send them your Toledo consignments of seeds and grain if you want TOP PRICES. Accept their bids. Since 1846 they have passed through panics, wars, floods and fires. Ask for their SPECIAL reports. Read Boy Solomon's sermons.

Be friendly.

Write occasionally.

Frederick W. Rundell
ESTABLISHED 1877

W. A. RUNDELL & CO. Grain and Seeds

CASH AND FUTURES

Consignments Solicited Ask for our Daily Grain Bids
Room No. 33 Produce Exchange, TOLEDO, O.

# The J. J. Coon Grain Co. GRAIN, SEEDS AND FEED

61 Produce Exchange
TOLEDO, OHIO

CONSIGNMENTS SOLICITED

CASH AND FUTURES

## The Cuddeback Grain Co.

We buy track elevator for direct shipment to interior and eastern markets Futures handled in Toledo or Chicago Special attention given consignments

32 Produce Exchange, TOLEDO, OHIO

## REYNOLDS BROS.

TOLEDO, O.
Ruy and Soll Gra

SELL US YOURS

If you don't get our bids, ask for them. Consignments always welcome. Consign us yours.

FRED MAYER

FRED W. JAEGER

ESTABLISHED 1879

# J. F. ZAHM & CO.

GRAIN and SEEDS
TOLEDO, OHIO

Handling consignments and filling orders for futures
OUR SPECIALTY

SEND FOR OUR DAILY CIRCULAR; IT'S FREE

**TOLEDO** 

## CLOVER SEED

Consign yours to

## Southworth & Company

36 and 37 Produce Exchange, TOLEDO, O.

### PEORIA

ESTABLISHED 1875

# P. B. & C. C. MILES Grain Commission Merchants BUYERS AND SHIPPERS

36-37 Chamber of Commerce,

PEORIA, ILL.

A. G. TYNG, Jr.

D. D. HALL

# TYNG, HALL & CO. Grain and Commission Merchants

PEORIA. ILLINOIS

## Van Tassell Grain Company

GRAIN COMMISSION MERCHANTS

BUYERS and SHIPPERS
43 AND 45 CHAMBER OF COMMERCE
PEORIA, ILLINOIS

### LANCASTER

## DO YOU REALIZE

That country trade always pays you best in every way?

We work a large country business. See the point?

JONAS F. EBY & SON, LANCASTER, PA.

## BUFFALO

W. E. TOWNSEND

A. T. WARD

TOWNSEND-WARD CO.

GRAIN COMMISSION

Buffalo,

New York

We solicit your consignments for Buffalo market

### INDIANAPOLIS

The

## Bassett Grain Co.

**INDIANAPOLIS** 

Telephones 80

Rooms 33 and 35 Board of Trade

### BALTIMORE

LOUIS MÜLLER, Pres't. JOHN M. DENNIS, Vice-Pres't, FERDINAND A. MEYER, Treas.

## LOUIS MÜLLER CO.

Crain Receivers and Exporters
BALTIMORE, MD.

Members of the Baltimore Chamber of Commerce, Chicago Board of Trade, St. Louis Merchants' Exchange, Grain Dealers' National Association, Indiana Grain Dealers' Association.

GEO. A. HAX

Established 1882

J. B. WM. HAX

## G. A. HAX & CO.

#### **GRAIN AND HAY COMMISSION**

445 North Street,

Baltimore, Md.

MEMBERS: National Grain Dealers' Association National Hay Association

## CLEVELAND

## THE UNION ELEVATOR CO.

BUYERS AND SHIPPERS

WHEAT, CORN, OATS, HAY AND STRAW

OUR SPECIALTY: RECLEANED ILLINOIS SHELLED CORN CLEVELAND, O.

#### CAIRO

## H. L. Halliday Milling Co.

RECEIVERS AND SHIPPERS

CORN-WHEAT-OATS

CAIRO. ILLINOIS

BUFFALO

## Burns-Yantis Grain Company

SUCCEEDING

BURNS GRAIN CO. AND S. W. YANTIS

Receivers and Shippers of

## Grain and Grain Products

Chicago, Ill.,

Buffalo, N. Y.

ELEVATOR AT HAMMONO, IND.

Capacity, handling 75 cars daily, storage, 500,000

## GRAIN RECEIVERS

## CHICAGO

E. GERSTENBERG

A. GERSTENBERG

## Gerstenberg & Co.

Commission Merchants HANDLE ALL GRAINS AND SEEDS

Barley a Specialty

OUR SERVICE WILL PLEASE YOU **CHICAGO** 

IF YOU WANT THE EXPERIENCE OF A STRICTLY HIGH-GRADE FIRM TRY

## CRIGHTON & CO. Grain Merchants

Royal Insurance Bldg.,

### Square Dealing

If we have not handled your Chicago Business, try us.



and Top Prices. Grain Re-

ceiving and Commission Merchants.

Wheeler Bldg., 6 and 8 Sherman St., CHICAGO

requires unusually close attention this season because of its condition and because of unusual trade conditions generally. From now on I will give consignments of it especial attention

### GARDINER B. VAN NESS

Grain Commission

Main Office 640-641-642 Postal Telegraph Bldg., Chicago

St. Louis

## CHICAGO

GEO. S. DOLE, Pres.

H. N. SAGER. Sec. J. H. DOLE & CO.

(Established 1852)

Commission Merchants, Grain and Seeds

We solicit your

CONSIGNMENTS and orders in futures

226 La Salle Street,

**CHICAGO** 

PHILIP H. SCHIPPLIN, Pres. EUGENE SCHIPPLIN, Secy.-Treas. H. HEMMELGARN, Vice-Pres.

PHILIP H. SCHIFFLIN & CO., Inc.

Successors to

H. HEMMELGARN & CO.

## Commission Merchants

515-518 Postal Telegraph Bldg. CHICAGO, ILLINOIS

Consignments of all kinds of Grain and Field Seeds a specialty

Good Prices

**Prompt Returns** 

**Very Best Attention** 

and W. A. FRASER CO.

"They're Running Mates"

MINNEAPOLIS

CHICAGO

MILWAUKEE

## Lamson Bros. & Co.

ESTABLISHED 1874

Commission Merchants - AND -

Track Buyers of Grain

6 Board of Trade

**CHICAGO** 

BRANCH OFFICES IN IOWA

Des Moines Iowa City Parkersburg

Ft. Dodge Storm Lake Iowa Falls Independence

Cedar Rapids Waterloo Mason City

Ask for Bids

Consignments Solicited

## J. ROSENBAUM GRAIN

GRAIN MERCHANTS



## RUMSEY & COMPANY COMMISSION MERCHANTS

Consignments a Specialty for forty years

Branch Offices PEORIA ST. LOUIS I. P. RUMSEY FRANK M. BUNCH HENRY A. RUMSEY

### CHICAGO

## YOUNG &

SUCCESSORS TO YOUNG & NICHOLS Established 1883

Grain Commission Merchants

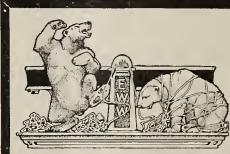
SOLICIT YOUR CONSIGNMENTS AND ORDERS FOR FUTURES 169 Jackson Blvd., CHICAGO, ILL.

LAVERNE A. LEWELLYN, President

## Merchants Grain Co. COMMISSION **MERCHANTS**

74 Board of Trade, CHICAGO

Our experienced service and personal attention is a guarantee of the satisfactory handling of your business.



"The Crops Are Now in the 'Making'

The most exciting period in the grain year is now at hand. My market letters keep you in touch. Write for "Grain Speculation Not a Fine Art," the book that contains more trading wisdom than any other publication.

E. W. WAGNER



J. H. WARE E.F. LELAND

Consign your grain and seeds and send your Board of Trade Orders to

400-410 Postal Telegraph Bldg., Chicago.

GRAIN, PROVISIONS, STOCKS AND COTTON.

Write for our Daily Market Letter.

Your interests are our interests.

Special attention given to cash grain shipments.

#### GRAIN RECEIVERS

### CHICAGO

C. W. BUCKLEY, Sec'y and Treas.

## SOMERS, JONES & CO.

(Incorporated)

**COMMISSION MERCHANTS** 

82 Board of Trade Bldg.,

CHICAGO

GRAIN AND FIELD SEEDS CONSIGNMENTS AND ORDERS FOR FUTURE DELIVERY SOLICITED. :: LIBERAL ADVANCES ON CONSIGNMENTS

**BUFFALO** 

ALBANY

**BOSTON** 

## E. W. ELMORE Grain Buyer and Shipper

Operating the Interior Elevator at South Bend, Ind.

617 Postal Telegraph Building.

**CHICAGO** 

## W. H. LAKE & CO.

Commission Merchants Grain, Provisions, Stocks

50 Board of Trade

CHICAGO

MEMBERS: Chicago Board of Trade; New York Produce Ex-change; St. Louis Merchants' Exchange; Minneapolis Cham-ber of Commerce.

## W. H. MERRITT & CO. **Grain Buyers and Shippers**

CORRESPONDENCE SOLICITED

87 Board of Trade,

CHICAGO, ILL.

## J. C. Shaffer & Co.

Buyers and Shippers ===of Grain====

240 La Salle St.

Chicago

### F. E. WINANS

Grain and Field Seeds Commission Merchant

BARLEY, OATS, WHEAT, CORN, RYE TIMOTHY, CLOVER, FLAX, HUNGARIAN MILLET

6 SHERMAN STREET, CHICAGO

Write us freely on all matters pertaining to grain and field seeds. Your questions fully and cheerfully answered; particular attention paid to timothy seed and grain by sample. Consignments and speculative orders receive our careful personal attention.

## ARMOUR GRAIN GRAIN DEALERS

Consignments solicited. This department is fully equipped in every way to give the very best service in Chicago.

205 La Salle St.

CHICAGO

## FREEMAN BROS. & CO.

Successors to H. H. FREEMAN & CO.

HAY, STRAW AND GRAIN

## COMMISSION MERCHANTS

Correspondence and Consignments 66 BOARD OF TRADE Solicited. . . Market Reports on CHICAGO, II CHICAGO, ILL.

### CHICAGO

Consign and Place Your Future Orders with

### Rosenbaum Brothers

Commission Merchants

77 Board of Trade.

## H. M. PAYNTER

**GRAIN COMMISSION** 

Special attention given consignments of grain

Orders in futures carefully executed.

700-718 Royal Insurance Bldg., Chicago.

All business transacted through and confirmed by H. W. Rogers & Bro.

H. W. ROGERS, Pres. J. C. ROGERS, Vice-Pres. C. J. HURLBUT, Secy. and Treas.

### ROGERS GRAIN COMPANY

(Incorporated)

Buyers, Shippers and Exporters of

= GRAIN =

Elevator proprietors on Illinois Central and other Railroad Systems.

Main Office: 700-701 Royal Insurance Bldg., Chicago

## BOGERT, MALTBY & CO.

## COMMISSION MERCHANTS

Correspondence and Consignments Solicited Orders for future delivery carefully executed Screenings and Mill Feed

306-308 Postal Telegraph Building CHICAGO

## WARNER & WILBUR,

GENERAL COMMISSION **MERCHANTS** 

CONSIGNMENTS AND ORDERS IN FUTURES SOLICITED 417 and 419 Royal Insurance Building CHICAGO, ILL. Established 1879

## HULBURD, WARREN & CHANDLER

Stock Brokers and Commission Merchants, Grain and Provisions

Business Solicited in any Department. Receiving, Shipping, Futures.

202 La Salle St.,

**CHICAGO** 

## E. W. BAILEY & CO.

## Commission Merchants

GRAIN, SEEDS AND **PROVISIONS** 

72 Board of Trade.

CHICAGO

## WILLIAM J. POPE, Prest. W. N. ECKHARDT, SECY. POPE **ECKHARDT**

COMMISSION

CRAIN SEEDS PROVISIONS

\$17-321 Western Union Building. CHICAGO.

## CHICAGO

### C. H. THAYER & CO.

Grain, Seeds, Futures

Your Consignments and Future Orders Solicited

Our untarnished record for more than a quarter of a contury, backed up with over \$100,000.00 capital, certainly speaks for itself.

2 @ 4 Sherman St., CHICAGO

Minneapolis

Milwaukee

St. Louis

Kansas City

J. K. HOOPER, President. ERVIN A. RICE, Vice-President. E. G. BROWN, Secy-Treas

HOOPER GRAIN CO.

## OAT SHIPPERS

Postal Telegraph Bldg., Chicago

OPERATE ATLANTIC ELEVATOR AND GRAND TRUNK WESTERN ELEVATORS, CHICAGO.

ESTABLISHED 1885

#### ENNIS & STOPPANI

Grain, Stocks, Bonds

MEMBERS

Chicago Board of Trade New York Produce Exchange New York Con. Stock Exchange Milwaukee Chamber of Commerce

New York Chicago, Ill. Bloomington, Ill Boston

Chicago Office, 400-403 The Rookery F. M. CLARY, Manager

## **NEW YORK CITY**

## BROOKLYN HAY & GRAIN CO.

HAY, STRAW AND GRAIN COMMISSION MERCHANTS

ON ALL MARKETS IN NEW YORK HARBOR

Office: Borough of Brooklyn, New York

## PHILADELPHIA

L. F. MILLER & SONS,

RECEIVERS AND SHIPPERS OF

Grain, Feed, Seeds, Hay, Etc. OFFICE: 2931 N. BROAD ST., PHILADELPHIA, PA.

CONSIGNMENTS SOLICITED. Special attention given to the handling of CORN AND OATS.

REFERENCES | Manufacturers' National Bank, Philadelphia, Pa Union National Bank, Westminster, Md.

## KANSAS CITY

R. J. THRESHER, Prest.

L. A. FULLER, Secy.

THRESHER FULLER GRAIN CO.

Grain Commission Merchants

CONSIGNMENTS SOLICITED Grain Bought and Sold for Future Delivery.

311-14 Board of Trade.

Kansas City, Mo.

## MOORE-LAWLESS GRAIN CO.

### COMMISSION

CASH - FUTURES

325-26 BOARD OF TRADE, KANSAS CITY, MO.

## MACDONALD ENGINEERING CO.

**ENGINEERS AND CONTRACTORS** 



Builders of Grain Elevators in Wood, Steel, Concrete or Combination Materials.

549-51-52-53 Monadnock Building CHICAGO, ILL.

## John S. Metcalf Co.

Builders of

Terminal Elevators
Concrete Storage Bins
Transfer Elevators

Drawings and Specifications

THE TEMPLE, CHICAGO

## The BOOK of CORN

SHOULD BE ON THE DESK OF EVERY ELEVATOR MAN WHO HANDLES CORN

It is the only work that covers the field from the growing to the final disposition of the cereal. An exhaustive treatise on corn growing, breeding, marketing, etc.

The book has been prepared by specialists, under the direction of Herbert Myrick, and covers all features of the corn business. It tells not only how corn should be treated by the farmer as producer in every step of the program of corn culture, but also how to market corn and what ultimately becomes of it—on the farm, as feed; or in the world's markets as the raw material of vast manufacturing industries - - - Price, \$1.50 per copy

For sale by MITCHELL BROTHERS CO. 315 DEARBORN STREET, CHICAGO, ILLINOIS

SEEDS

### THE ALBERT DICKINSON CO.

GRASS SEEDS, CLOVERS, FLAX SEED, LAWN GRASS, BEANS,
PEAS, POP CORN, BIRD SEEDS, BUCKWHEAT, BAGS, ETC.
CHICAGO, ILL. BRANCH: MINNEAPOLIS, MINNE

## Witherspoon-Englar Company

Designers and Builders of

## FIREPROOF Grain Elevators



Cut shows H. W. Rogers & Bro.'s Elevator at Harvey, Ill. Operating house burned Sept. 30, 1905. Tile tanks, built by us, with contents were uninjured. This shows the advantages of hollow tile bin construction.

Designs and estimates promptly furnished for all kinds of buildings for the handling and storage of grain in any locality.

1244-1259 Monadnock Building, Chicago, Ill.

# LET US FIGURE WITH YOU ON YOUR GRAIN STORAGE



We have the latest Patented System for building concrete structures on the market. Write us your requirements and let us give you prices and particulars of our system.

McClanahan Concrete Co., Fort Branch, Indiana

## JAMES STEWART & CO.

Designers and GRAIN ELEVATORS in all parts of Builders of GRAIN ELEVATORS

Concrete



Steel

Wood

Brick

Tile

Anheuser-Busch Barley Cleaning House, St. Louis, Mo.

## GRAIN ELEVATOR Department

1811 Fisher Building

CHICAGO

W. R. SINKS, Manager

R. H. FOLWELL, Engineer

We also do general contracting and have offices in the following cities

Write or call on any of them

CHICAGO, 1LL.—1811 Fisher Bldg. NEW YORK—130-137 Broadway PITTSBURG, PA.—Westinghouse Bldg. SAN FRANCIS ST. LOUIS, MO.—Lincoln Trust Bldg. NEW ORLF.ANS, LA.—Hibernia Bank Bldg. MONTREAL, CAN.—Sovereign Bank Bldg. CAL.—Powell and Geary St.

# Not the Biggest Elevator in the World



## BUT THE BEST

of Fireproof Brick
Construction

In Any Design

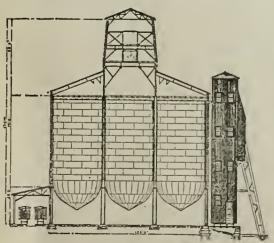
Write for Plans and Estimates

### S. H. Tromanhauser

Room 3, Old Chamber of Commerce Building

Minneapolis, - Minnesot

## Riter-Conley Mfg. Co.,



Cross-section of Great Northern Elevator furnished by us at Buffalo, N. Y. Three million bushels' capacity. Steel throughout. Manufacturers
Engineers,
Contractors.

## Grain Elevators of Steel,

=ALSO

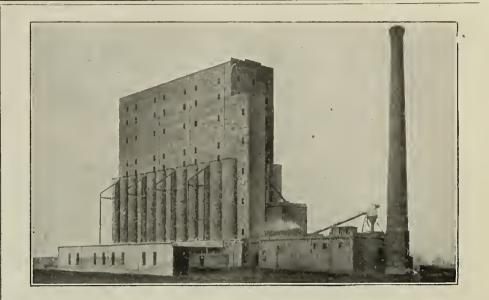
Gas Holders with Steel Tanks

Water and Oil Tanks, Steel Buildings, Steel Stacks and Steel Construction of Every Description,

Designed, Furnished and Erected in All Parts of the World.

General Office, Water Street, Pittsburg. New York Office, Trinity Building, 111 Broadway.

LONG-DISTANCE TELEPHONE CONNECTION



# Fireproof Grain Elevator

Recently completed for the Chicago, Burlington & Quincy Railway Co. at Harlem (Kansas City), Missouri.

This elevator is of an entirely new type throughout, originated, designed and constructed by

## The Barnett & Record Company

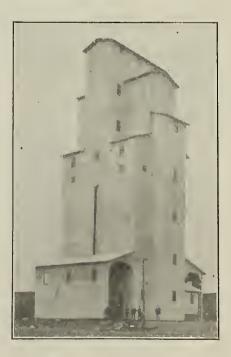
Engineers and General Contractors MINNEAPOLIS, MINNESOTA



## WHEN YOU LET YOUR CONTRACT



for your new Elevator you want a house built with a view not only to first cost, but with a view to economy in maintenance.



Our long experience enables us to fill your needs on both points with minimum expense, but we don't sacrifice strength or quality for the sake of getting.your contract. Write us today for estimates.



## Burrell Engineering and Construction Co.



1139-1140 Stock Exchange Bldg., CHICAGO

## STEEL STORAGE and ELEVATOR **CONSTRUCTION COMPANY**

**BUFFALO, N. Y.** 



Designers and Builders

STEEL OR CONCRETE CONSTRUCTION ———

Drawings and Specifications

G. H. BIRCHARD Grain Elevators LINCOLN, NEB.

American Miller American Elevator and Grain Trade FOR ONE YEAR



н. м. ніскок L. O. HICKOK & SON

DESIGNERS, ENGINEERS, CONTRACTORS ELEVATORS

General Construction in Wood, Brick and Concrete PLANS—SPECIFICATIONS—ESTIMATES 320 Flour Exchange Minneapolis, Minn COUNTRY ELEVATORS—TRANSFER ELEVATORS—MILLS

Designed and erected complete, on contract or on a percentage basis. Large jobs receive my personal attention-small ones, too

FRED FRIEDLINE, Architect and Engineer, 511-512 Traders Bldg., Chicago, Ill.

J. P. CHURCHILL

C. & A. ENGINEERING CO.

ELEVATORS, MILLS, FACTORIES, WAREHOUSES Mill and Elevator Machinery, Power Transmissions and Supplies, Plans, Specifications, Estimates.

627 BOARD OF TRADE BUILDING, - - -

INDIANAPOLIS, INDIANA

OLSON BROTHERS & CO.

ENGINEERS and CONTRACTORS

Grain Elevator Construction

Power Transmission

Elevating and Conveying Machinery

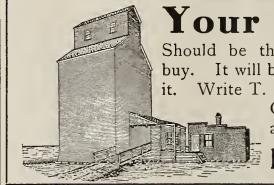
703-707 Bloomingdale Avenue **CHICAGO** 

Who Builds Right Kind of Elevators at the Right Kind of Price MINNEAPOLIS, MINN. 322 Fourth Ave., South,

builds Elevators complete, or will furnish equip-

ment for same. Write us. Prompt Service.

YOUNGLOVE CONSTRUCTION CO., 315 Pearl St., Sioux City, Iowa



**Your Elevator** 

Should be the best that money can buy. It will be if IBBERSON builds it. Write T. E. Ibberson, 308-310-312 Corn Exchange, Minneapolis, Minn.

He Knows How

# STORAGE TANKS STEEL ELEVATORS

FULL EQUIPMENTS

Give us the opportunity to submit you plans and estimates. We can please you. Ask us for Catalogue "A" Twin City Corliss Engine and Catalogue "F" Elevator and Power Transmitting

Minneapolis Steel & Machinery Co.

MINNEAPOLIS, MINN.



STORAGE TANKS, 52,000 BUSHELS CAPACITY EACH





## THE POLICYHOLDER

has to go into his pocket to pay for fire insurance, but only about onehalf as far when he is insured in the



Where well built, well cared for and profitable elevators are insured by themselves to pay their own losses only the cost is much lower. is only one of the reasons why so many country elevators are insured with us and why you should write for particulars to

C. A. McCOTIER, Secretary

## The Grain Shippers Mutual Fire Insurance Association

WRITES

Fire, Lightning and Tornado Insurance on Grain Elevators

Risks in force, \$7,000,000.00 Losses paid to date, \$335,000.00

IF INTERESTED, ADDRESS

F. D. BABCOCK, Secretary Ida Grove, Iowa

#### MILLERS MUTUAL FIRE INSURANCE ASSOCIATION OF ILLINOIS

ALTON, ILL.

Wrote...\$5,348,463.75 insurance last year Paid .....\$110,724.14 in losses last year Added.....\$24,230.30 to surplus last year Assessed only 45% of basis rates last year

If you want the best of insurance at the lowest cost, write to us.

Insurance in force......\$10,158,139.43 D. R. SPARKS, President A. R. McKINNEY, Secretary

CHICAGO AGENT M. W. FUGIT, 740 National Life Building

### MILL OWNERS'

## MUTUAL FIRE INSURANCE

COMPANY DES MOINES, IOWA

ORGANIZED 1875 Insures Mills, Elevators, Warehouses and contents.

Net Cash Assets, \$ 266,243.81 1,339,403 60 Losses Paid, Saved to Policy Holders,

\$1,752,149.12

J. G. SHARP, Secretary



## Millers' National Insurance Company

205 La Salle St. CHICAGO. - - ILL.

CHARTERED 1865

Insurance with a maximum of security at a minimum of cost for ELEVATORS, WAREHOUSES and CON-TENTS, on the Mutual Plan.

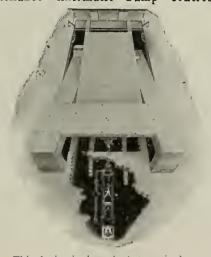
Five-Year Policies (or short term policies on grain, if required).

Semi-Annual Assessments. costing about one-half Stock Company rates.

No conflagration hazard.

\$4,937,625.96 883,105.27 Gross Assets, -Net Cash Surplus -

Reliance Automatic Dump Controller



This device is the only Automatic dump controller on the market that requires neither hand

troller on the market that requires neither hand nor power to operate.

It causes the dump to settle down easily without the least jar or jerk and prevents accident to wagon or team

This device is a small cylinder filled with cold tested oil in which travels a piston which is attached to the front end of the dump. The motion of the dump is controlled by the forcing of this oil through a regulating valve, which can be adjusted to suit operator.

Equip your dumps with them and avoid accident in the handling of the coming crops.

Shipped on trial to responsible parties.

Write us for particulars and price.

# HESS=DRIED CORN

Dried with warm air. Cooled with fresh air in a HESS DRIER.

Best for Shipping

for Storing Best

Milling Best for

HESS-DRIED CORN is normal in all respects. It will germinate strongly, and its milling qualities are improved. The treatment of HESS DRYING sweetens it, removes all odors, and by driving out all excess moisture, prevents heating, and makes it safe for shipping or for storing indefinitely.

Sold by many leading grain dealers throughout the U.S. A free list of these dealers will be supplied on request.

Hess Warming & Ventilating Co.

910 Tacoma Bldg., CHICAGO



## **Elevators and Conveyers**

For SACKS, BARRELS, BOXES



Illustrated in catalogue No. 80 with other mill specialties. Mailed free.

THE JEFFREY MFG. CO.

COLUMBUS, OHIO, U. S. A.

## Spout Cut-off Valve



# Mr. Business Man

"BUSINESS AID" gathers systematically and gives in a nutshell the cream of what all the courts of last resort are de-you ought to know. This is the

the courts of last resort are deciding that you ought to know. This is the Magazine's specialty—practical business law news, boiled down, plain and interesting, as to be had nowhere else.

"BUSINESS AlD" answers questions in business law. "BUSINESS AID" has special articles on business methods. "BUSINESS AID" gives a monthly summary of general news and views of the business world, etc.

Others find it invaluable. Try it three months for 25 cents. "An ounce of prevention is worth a pound of cure." Address—"BUSINESS AID,"112 Clark St., Chicago, Ill.





## Hall Signaling Non-Mixing Distributor

Convenience and Saving in Labor in knowing it is always accurately locked.

Automatic Signaling Insures using the full capacity of bins, without backlegging or spilling grain when

shifting spout, or mixing it in other bins, or on the floor.

## Absolutely No Repairs.

Guaranteed for 5 Years

Its Simplicity in design, in construction and in operation commends it as a scientific and mechanically perfect device.

One man can get better results in handling a country elevator with this equipment than two men can do otherwise.

## HALL DISTRIBUTOR CO.

506 First Nat'l Bank Building

OMAHA, NEB.

## "AMERICAN"

## For Long Drives

Rope transmission is most economical in first cost as well as in maintenance. There is almost no limit to the distance or direction in which power may be transmitted, either indoors or out of doors.

"American" Transmission Rope is weather proof and is not affected by exposure. It requires no external dressings of any kind. When desirable the shafts can be run through the walls of the building and the drive placed entirely outside, thus saving valuable inside space.

Write for "Blue Book of Rope Transmission," in which all phases of rope driving are carefully discussed and clearly illustrated by photographs and diagrams.

## The American Manufacturing Co.

65 Wall Street, - - New York City
Chicago Office, 85 Kinzie St.

## TRANSMISSION ROPE





CUTLER STEAM DRYER

THE

SOLD BY ALL MILL FURNISHERS

Not an Experiment. In successful use 25 years drying CORN MEAL AND HOMINY,

BREWERS' GRITS AND MEAL,
BUCKWHEAT, RICE AND
ALL CEREAL PRODUCTS.

ALSO SAND, COAL DUST, GRAPHITE, CLAY AND ORES

Automatic in operation, requiring no attention. Double the capacity of any other Dryer sold for same price.

THE CUTLER CO., North Wilbraham, Mass.

## Elwood's Grain Tables

Show the value of any number of bushels or pounds of WHEAT, RYE, OATS, CORN OR BARLEY at any given price from 10 cents to \$2.00 per bushel. One of the most useful books ever offered to millers. Indorsed by prominent millers and grain dealers. Bound in cloth, 200 pages. Mailed on receipt of price

**\_\_\_\_\$1.25** 

MITCHELL BROS. CO., 315 Dearborn St., Chicago, IU.

## WHAT YOU NEED

In Elevator Machinery and Supplies may be had on short notice, at any time, by sending your orders to us. We have the big assortments, our goods are always of the best obtainable quality and our prices as low as consistent with such quality.

We have the finest equipment in the country for doing

## Roll Corrugating and Grinding

Try us once and learn what perfect work is like. Write for our Catalog and Prices.

### THE STRONG-SCOTT MFG. COMPANY

Formerly Strong & Northway Mfg. Co.

N. W. Agents: Richardson Automatic Scale Co., The Invincible Grain Cleaner Co., Alsop Process Co., Dulour Belting Cloth Co., and Knickerbocker Dust Collectors.

MINNEAPOLIS, MINN.

## Bowsher's All-Around Feed Mill



(Sold with or without sacking elevator)

It CRUSHES ear corn (with or without shucks) and GRINDS all kinds small grain and KAFFIR IN THE HEAD. Has CONICAL shaped GRINDERS, DIF-FERENT FROM ALL OTHERS. RUNS LIGHT. Can run EMPTY WITHOUT INJURY. Ahead of rolls or stones in speed and quality of work.

YOU NEED a mill now. QUIT THINKING about it. COMMENCE to investigate. Give US a chance and we'll tell you WHY we think ours is the best. SEVEN SIZES: 2 to 25 H. P.

Circular sent for the asking.

THE N. P. BOWSHER CO., South Bend, Ind.

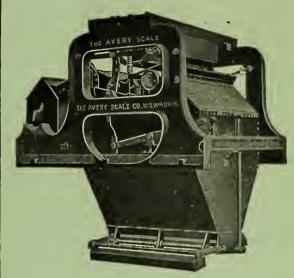
IF THE RAILROADS LIKE TO FEED THE BIRDS BY USING LEAKING CARS

## There Is No Reason

WHY THE GRAIN DEALER SHOULD PAY FOR IT

## Avery Automatic Scales

KEEP EXACT RECORDS OF WEIGHTS



After looking over makes of automatic scales for quite a long time, when we came to the Avery we almost bought it at first sight, the mechanism was so simple and yet the most complete of any automatic weigher we saw in the market.

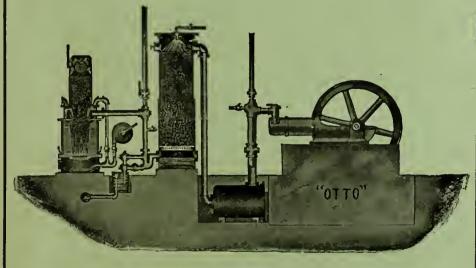
IT DOES AWAY WITH ERRORS THAT OCCUR IN THE OLD WAY OF WEIGHING AND YOU TAKE NO

CHANCES OF GETTING INCORRECT WEIGHTS WHEN WEIGH-ING WITH THE AVERY.

> LAVENGOOD GRAIN CO., Amboy, Ind.

AVERY SCALE CO., North Milwaukee, Wis.

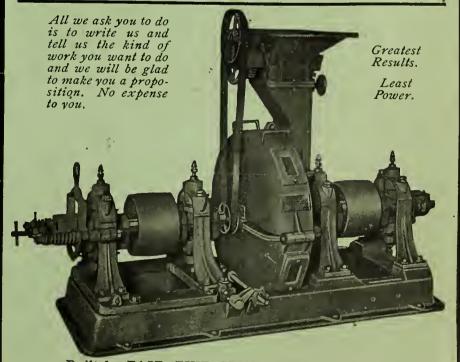
## Gold Medal at Jamestown



The U.S. GOVERNMENT paid this company a big compliment when it selected the "OTTO" Engine for use in making fuel tests at the Jamestown Exposition. The Jury of Awards also proved its fitness for its task when it AWARDED the "OTTO" the GOLD MEDAL. The "OTTO" has won FIRST PRIZE at every large Exposition held in this country since the Centennial in '76.

THE OTTO GAS ENGINE WORKS. PHILADELPHIA, PA.

## SCIENTIFIC Attrition Mills



Built for FAST, FINE GRINDING. Grinds Corn, Chop Feed, Bran, Offal, Screenings, Small Grain and a great variety of other products. Our new Catalogue is ready and we will be pleased to send you a copy.

FOOS MFG.
(Builders of Attrition Mills Since 1878)

SPRINGFIELD.

OHIO



OUR OPEN-JACKET CYLINDER TYPE Gasoline, Gas, Kerosene, Alcohol

STATIONARIES, PORTABLES, PUMPING OUTFITS, HOISTERS SAWING OUTFITS, BOAT ATTACHMENTS, DYNAMO OUTFITS

CHARTER GAS ENGINE CO., 400 Locust St., Sterling, Ill.



The expense and annoyance of painting will not recur every year or two if you use

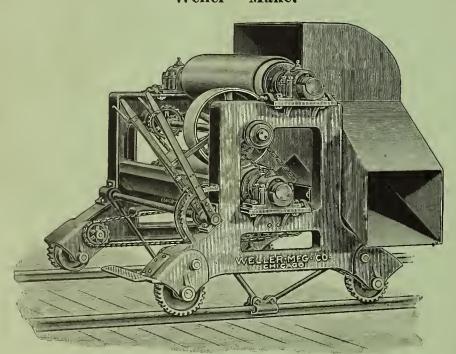
### Dixon's Silica-Graphite Paint

the "Proven Shield for Steel Work." Durability records in all climates;

Joseph Dixon Crucible Co., Jersey City, N. J.

## There will be no Trouble

If your elevator is equipped with machinery of "Weller" Make.



One of Our Late Types of Tripper for Belt Conveyor.

Our motto has been constantly the best that we can manufacture, with the result that grain men ordering equipments from us are assured of an economically working elevator, and one that will be equal to every emergency which the modern house is called upon to meet.

Let us figure with you on your equipment whether only one article is needed or a full outfit.

> WELLER MFG. CO. CHICAGO, ILL,

## Webster Machinery

For GRAIN ELEVATORS FLOUR MILLS



40-inch Reversible Belt Conveyor, 310 feet long, in 2,000,000-bushel Grain Elevator.

We Design, Manufacture and Install complete equipments of Grain Handling Machinery.

Write for our large Catalog No. 30

## WEBSTER M'F'G CO.

1075-1111 W. 15th St., Chicago

NEW YORK: 88-90 Reade St.

PHILADELPHIA: Penna. Bldg.

H. L. DAY, President

F. H. DAY, Vice-President WM. M. DAY, Treas. and Mgr.

## THE DAY COMPANY

SUCCESSOR TO

H. L. DAY

Sole manufacturer of DAY'S Patented Dust Collectors and Fuel Feeders; also manufacturer of Dust Collecting Systems.
Sole manufacturer of Bryant Automatic Oil Filters.
If you need a Dust Collecting System, a rearrangement of your old Dust System, or an Exhauster Fan, write us.

THE DAY COMPANY, 1118-1126 Yale Place, Minneapolis, Minn.

## West Allis Malleable Iron & Chain Belt Co., WEST ALLIS, WISCONSIN.

Detachable Chain Belting, Malleable Elevator Buckets,

Wagon Clevises, and TRADE MAR Malleable Iron Castings



First-class Goods and Quick Delivery.

## YOU WILL NOT

be compelled to file claims for short-ages if your cars are equipped with

FRED. W. KENNEDY, M'f'r, Shelbyville, Ind.

